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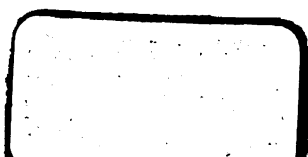
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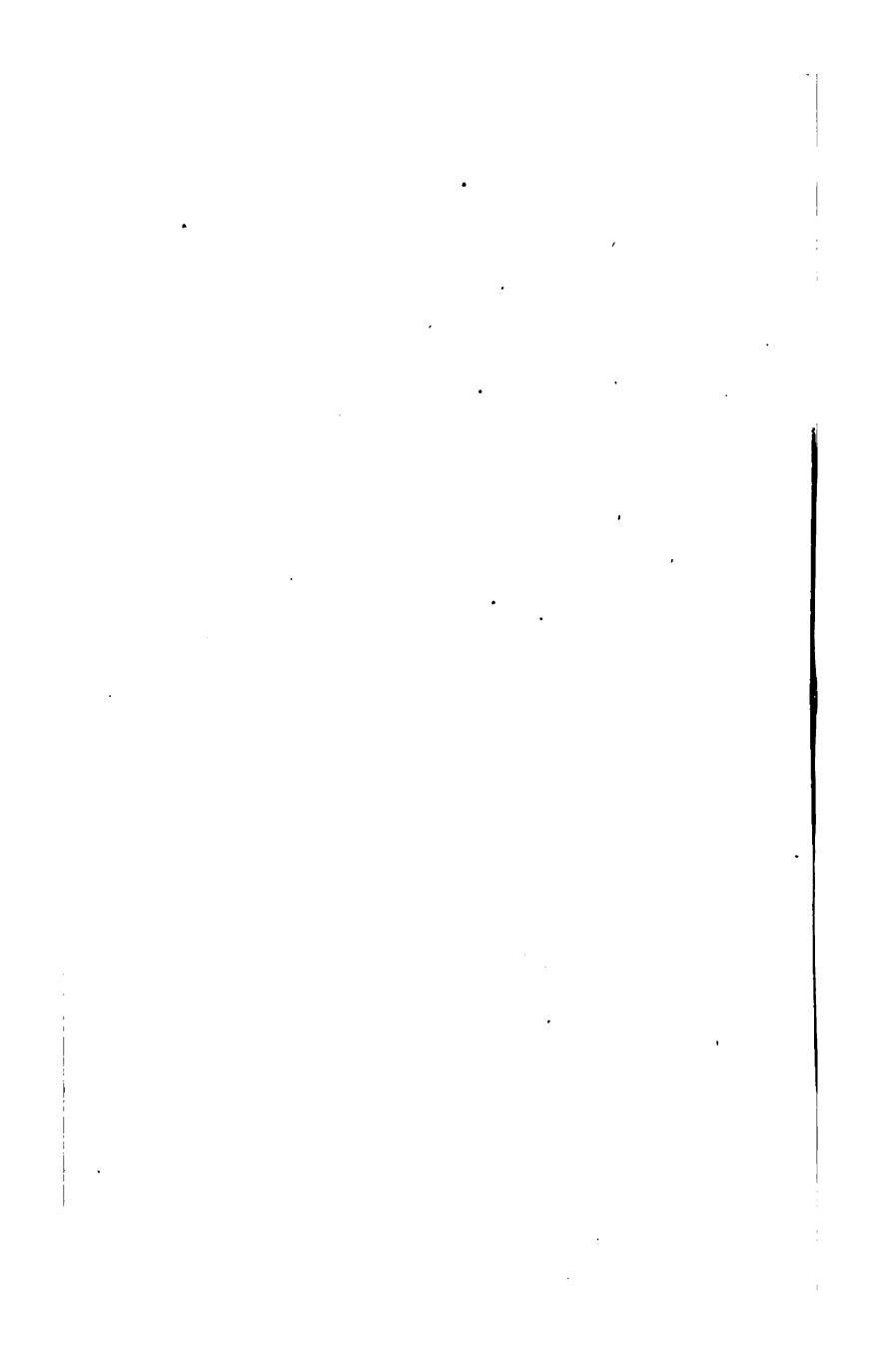
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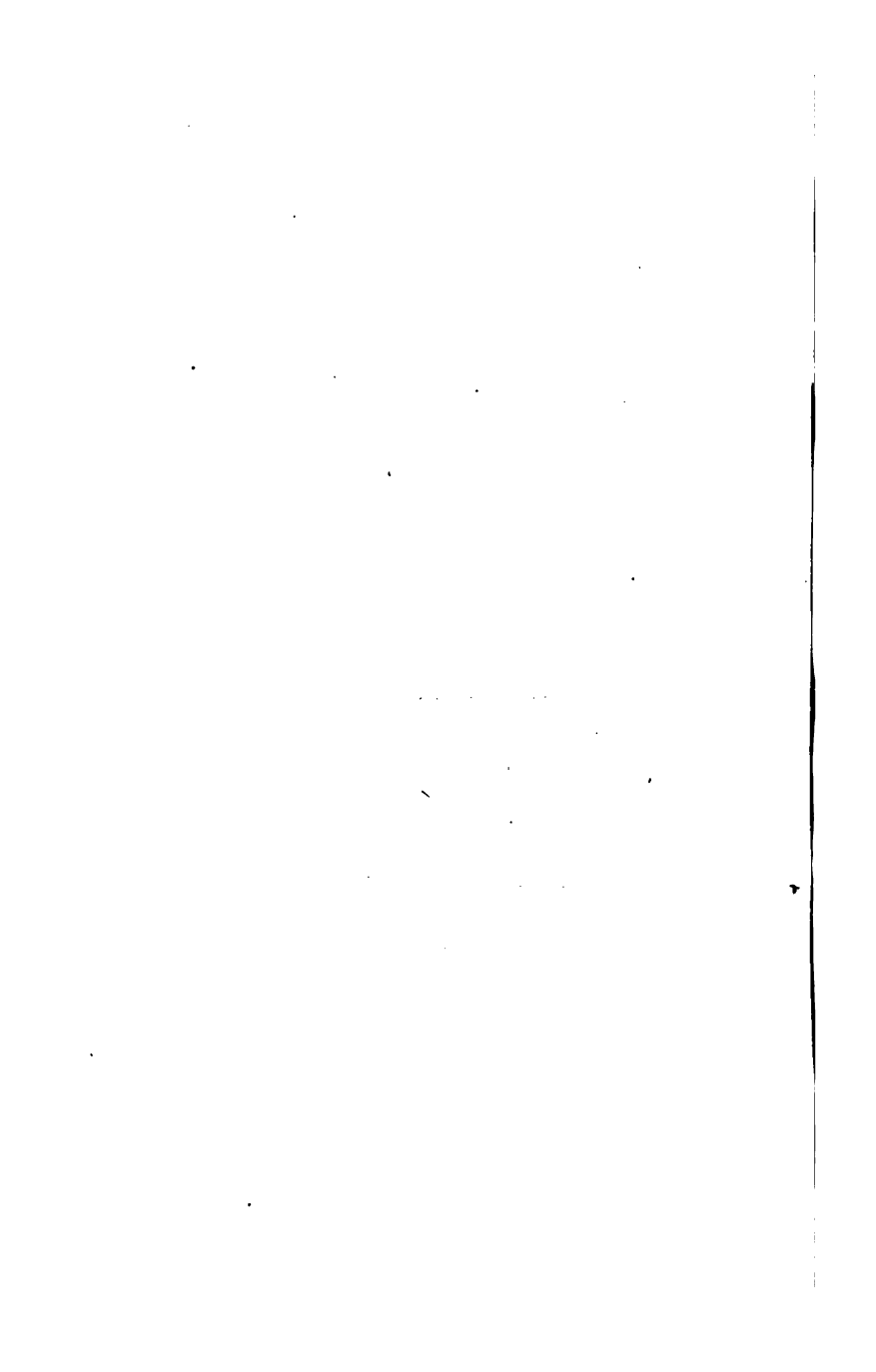
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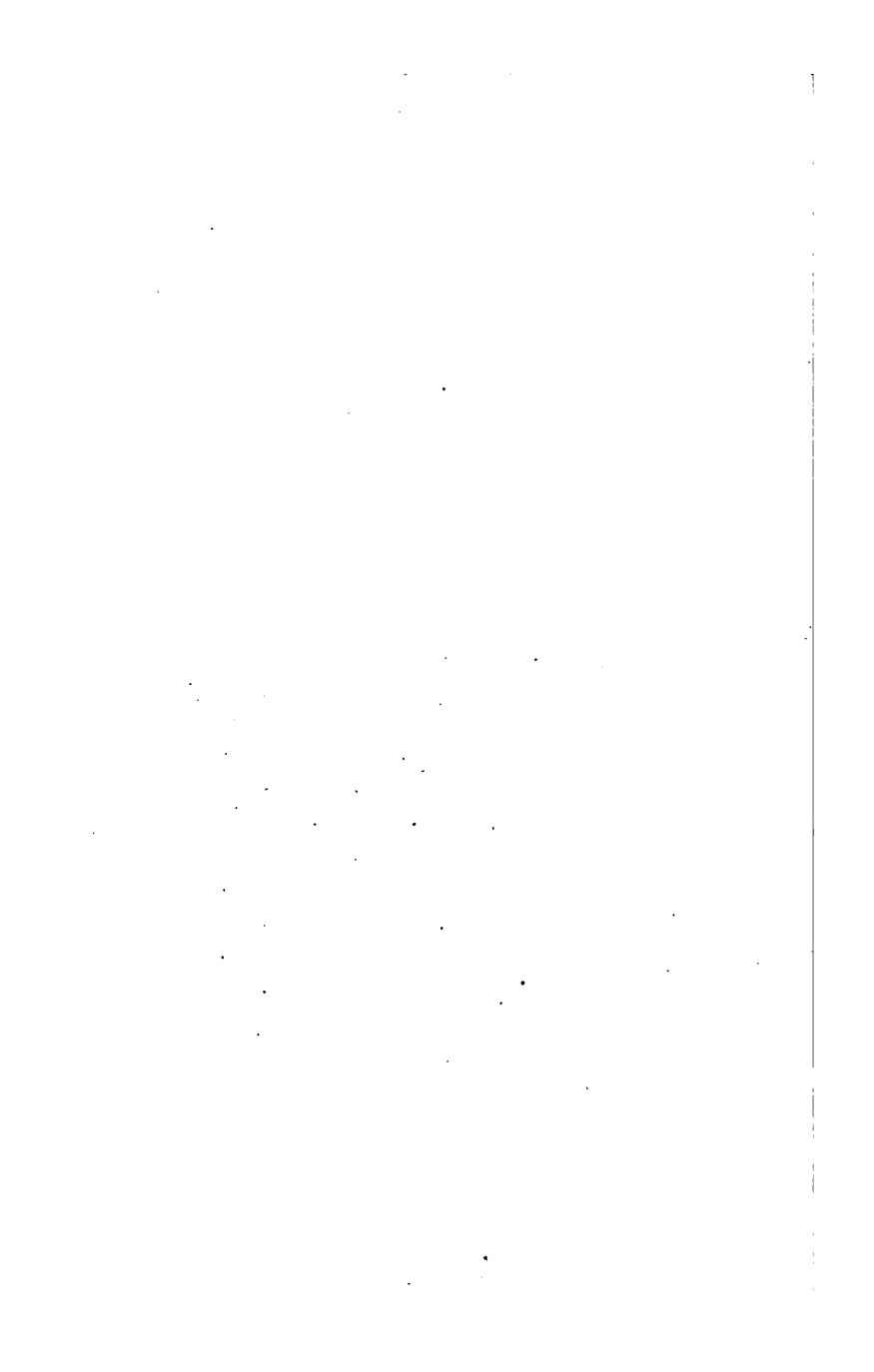
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INTRODUCTION.

I WILL. Much meaning is often conveyed in that brief sentence. The *I will* of an irresolute man is of little worth ; for he wills a thing one hour, and the next his purpose is entirely changed. But when a man of resolute character says *I will*, we feel almost as certain of the accomplishment of his purpose as though the proof were already before us. *I will.*—This fixedness of aim has led bad men to the commission of dreadful deeds ; but when rightly applied, it has accomplished an incalculable amount of good. Take, for instance, the case of a man who has had few opportunities in youth for mental cultivation, but who feels a craving for intellectual food ; he sees others whose minds have been alike neglected, obtain it in riper years, and he says—“ Those men are

self taught, and why may not I be? *I will*:" and he succeeds in his attempt. Again, there is the man of genius: he is poor, and there is none to encourage, and lead him forward; but he knows that others similarly circumstanced have worked their way upwards, and have given to the world lasting monuments of their talent. "Such and such men have overcome the disadvantages of humble birth and chilling poverty," he says, "and now they stand high in the ranks of literature and art. As they have proved successful, why may not I? *I will*:" and he becomes great. His works are the admiration of thousands.

It has been shrewdly remarked, that "the great difference between men—between the feeble and the powerful—the great and the insignificant—is energy; invincible determination." Energy and determination.—These qualities, when directed towards legitimate objects, gain respect in every grade of society. But a man may have energy without determination; he may be always busy, yet never accomplish anything that is useful, because his energies are not directed towards one point. When, however, a man possesses both these qualities, and, what is of equal importance, a

right balance of mind, he weighs the proportionate value of things. He then marks out the course which, should Divine Providence permit, he desires to pursue. Having thus a settled purpose in his mind, on he goes, without loss of time from hesitation and wavering. If we know such a man's principles, we may judge, with something like certainty, how he will act when placed in particular circumstances; for there is a consistency in his character. He never draws hasty conclusions; when, therefore, his opinions and purposes are once formed, they are not easily shaken. There is, if we may be allowed the expression, a moral nobility about him. His every movement expresses the character of his mind; his countenance tells of integrity and decision of purpose, and his step is firm and even.

How much higher such a man stands in the estimation of his fellows, than one who drones through the world without energy and decision. Such an individual rather exists than lives. He may be amiable, but his virtues are of a negative character—the mere absence of vices. He may be possessed of talent, but he makes little use of it, either for his own benefit or for others. Such a man is never known to perform

a great action. He is always wavering—he has no fixedness of purpose, and what he does, becomes powerless for want of concentrated energy in the carrying out. Thus he passes through life, pitied by some, and by others despised.

We must not, however, judge altogether from the outward seeming; the physical constitution of some men differ widely from that of others. These physical peculiarities are often erroneously regarded as indications of the tone of the mind; for instance, superficial observers mistake animal spirit for energy, and strength of nerve for strength of character. By this cursory glance, they often pass by as unworthy of notice; or even hold up to ridicule the man of genius, or profound research, whose retiring habits and weakness of constitution, may have produced a timidity of manner. Natural temperament, habits of thought, and peculiar circumstances must, therefore, be taken into account, before we can come to a just estimate of character.

“Not slothful in business; fervent in spirit,” Rom. xii. 11. “Whatsoever thy hand findeth to do, do it with thy might.” Here we find energy and determination enforced, as part of

our moral duty. The energy and determination which alone can make a man morally great and powerful, must be an intelligent, earnest, and thorough-hearted principle; having reference to the latter clause of the above quoted passage from the Romans, "Serving the Lord." The man whose fervour of spirit arises mainly from a desire to serve the Lord, is self-trusting, but not self-sufficient; he is independent, but not proud; he is inflexible, but not obstinate; prompt, but not rash; and he alone can correctly be termed great.

The foregoing remarks are intended to prove the wisdom of acting with decision and promptitude. The fact, that such qualities are needful, conveys the idea that there are difficulties to be overcome; and this is no speculative notion. It is wisely ordered that this present life shall be one of discipline, and nothing brings out our latent powers, and gives such force to the character as contending with difficulties. Taking a hasty and self-interested view of the subject, we may be inclined to think otherwise, and to complain of such an arrangement; but when we calmly consider, we must come to the conclusion, that the necessity which exists for both bodily and mental labour, is in itself a

blessing, contributing alike to man's happiness and his highest good. True, it was pronounced as a punishment for disobedience. "In the sweat of thy brow shalt thou eat bread." But He who passed that sentence is,

"From seeming evil, still educing good ;"

therefore labour, considered in the abstract, cannot be truly regarded as an evil.

Employment of some kind is necessary to the full development of our powers ; and the sterner duties of life, to a well regulated mind, not only acquire a cheerful aspect from the fact that they are duties, but give a higher zest to seasons of leisure. That mind is of a very low order which desires to remain inactive, or which merely seeks amusement for the present hour. Difficulties and discouragements likewise have their uses, though some shrink appalled at the most distant view of them, and never venture on a personal combat.

Speaking on the subject of overcoming difficulties, the late Sir Robert Peel, in an address he gave to the students at the Glasgow University, made the following excellent remark, "Do I say," he said, "that you can command

success without difficulty? No; difficulty is the condition of success. Difficulty is a severe instructor, set over us by the supreme ordinance of a parental guardian and legislator, who knows us better than we know ourselves.

“He that wrestles with us strengthens our nerves and sharpens our skill. Our antagonist is our helper. This amicable conflict with difficulty obliges us to an intimate acquaintance with our object, and compels us to consider it in all its relations. It will not suffer us to be superficial.”

Energy, and a firmness of aim which will grapple with difficulties, are highly desirable; but it is possible for these qualities to be directed towards unworthy objects; or if the thing desired be right, it may be pursued in an unworthy spirit. The motive must ever be the moral criterion of action. There is, in reality, a wide difference between ambitious projects pursued with the view of gaining public applause, and a noble struggle with adverse circumstances, springing from a desire either for an honourable independence, or from the still higher motive to benefit society. The line is not, however, at all times drawn with sufficient distinctness, and where men mark it for themselves, they

are apt to confuse the one with the other, and say they are actuated by a public spirit, when they are in truth heaping up to themselves wealth, or contending for distinction. We desire to be clearly understood on this point, lest whilst we are endeavouring to stimulate the youthful reader to honest industry, self-reliance, and a generous emulation, we should foster only selfishness and self-sufficiency. We have hitherto urged the personal advantages to be gained by energy and consistency of purpose, but we have no right to confine our sympathies within such narrow limits. No man should live to himself; his fellow men have a claim on his energies of mind and powers of body; and he whose impelling motive is entirely self, whether it be directed towards the acquisition of wealth, or in the pursuit of pleasure, or fame, or any other object, is unworthy of esteem, let him rise to what elevation he may.

Man, an intelligent being, possessing freedom of thought and action, is responsible to his Creator and moral governor for the right application of those powers. His actions are to be regulated by certain moral laws; and his mental capabilities are a precious loan, which he cannot allow to lie buried, without incurring the dis-

pleasure of his Lord. He must not only use them, but use them with special reference to His will.

“Occupy till I come.” This is not the command of a hard task-master. Our labour will be well repaid. Intellectual pleasures are the highest pleasures we are capable of enjoying, but they involve a fearful amount of responsibility. Some who are endowed with a large measure of talent, employ that talent in denying the existence of the God who gave it. How will they appear before Him at the judgment day? Will it not be with confusion of face? Others possessed of brilliant genius are only solicitous to please the fancy of a thoughtless throng; they live on the fickle plaudits of a giddy crowd. Is genius bestowed for such a purpose? Others, again, confine their intellectual gifts to self-gratifications, instead of using them as the beneficent Giver designed that they should be used, for the benefit of mankind at large.

Our country calls on us to exert our energies in support of her liberties and institutions, civil, benevolent, and religious. Our relative connections call on us for the exercise of energy, for it is written—“If any man provide not for

his own, and specially for those of his own house, he hath denied the faith and is worse than an infidel."—1 Tim. 5, 8. Self-respect calls on us to put forth our energies, for it is a disgrace to a rational being to allow the talents entrusted to him to lie unimproved. Lastly, God calls for the exercise of our energies in His service, and He has a right to claim them. They come from Him, and He can withdraw them whenever He pleases.

Our success in life depends in a great measure on our own persevering efforts, though only as secondary causes. Self-reliance is the instrument, God is the moving power. Our highest wisdom, therefore, as well as our highest duty is to do all things with an eye to His will. "Commit thy way unto the Lord, and He will direct thy path."

SIR HUMPHREY DAVY,

PROFESSOR OF CHEMISTRY.

HUMPHREY DAVY was the son of a carver in wood. He was born at Penzance, in Cornwall, on the 17th of December, 1778. His father came into the possession of a small family estate at Varfell, in Mount's Bay; but he still continued his employment, though rather as a source of amusement than from necessity. Humphrey was the eldest of five children. He spent his early childhood at home with his parents, but when they removed from Penzance to Varfell, he went to live with a Mr. Tonkin, a surgeon in that town, who was a friend of his mother's. This gentleman had attended Mrs. Davy's parents, who had been attacked by fever, and died within a few hours of each other. As the mother's greatest grief appeared to arise from the fact that she was about to leave her three little girls without a protector, and sufficient means for their sup-

port, the good surgeon had promised to be a friend to the orphans, and he had been true to his promise. The children had been immediately taken to his own home, and he had acted the part of a father towards them. In the course of time they were all married, and comfortably settled in life. Grace Millett, the second sister, who became Mrs. Davy, was the only one of the sisters who had any family, ; and Mr. Tonkin's kindness and affection for the mother extended to her children. Humphrey was an especial favourite with him, and he was pleased to see great aptness and intelligence in the boy.

Young Davy was sent to a grammar-school in the town, but he spent his holidays with his parents. He was very fond of reading, and, even when quite a child, he would make himself master of the contents of a book in an astonishingly quick space of time. He liked works of fiction, for he had a great love for the marvellous, and he often amused his school-fellows by telling them tales of wonderful adventures, and wild romances, the creations of his own fancy. "The Pilgrim's Progress" was an early favourite of his. The pleasing allegory caught his imagination, though he could not then understand the important truths which its imagery is intended to convey. He had a notion of being an orator it would seem ; for when not more than eight years of age, he was in the habit of mounting the carts which might chance to be standing before the door of

an inn, near Mr. Tonkin's house, or any other place which would serve as a platform; from this elevation he would harangue a number of boys, who collected round him. At other times, when at home, he would amuse himself by ranging the chairs in order round the room, and lecturing to them; this was a good exercise for a lad who was likely to become a public speaker.

In the year 1794, Mr. Davy died, and his widow then returned to Penzance. The following year Mrs. Davy, by the advice of her early friend Mr. Tonkin, apprenticed her son, Humphrey, to a Mr. Borlase, a surgeon and apothecary, in good repute for his skill, who was practising at Penzance.

It does not appear that the youth showed any particular bias for chemistry until he was thus thrown, by circumstances, into a position which rendered it necessary. Indeed the bent of his genius, at that time, seemed to be directed towards poetry and historical romance. It was said by one of our poets,—“If Davy had not been the first chemist, he would have been the first poet of his age.” Young Davy was more fond of philosophy than of physic, and an attic in Mr. Tonkin's house was usually the scene of his experiments. “He will blow us all into the air!” the old gentleman would exclaim, when some explosion took place, as it sometimes did during his chemical operations; at other times, when he found him, as he thought, neglecting his proper studies, he would say,—

"Was there ever so idle a dog!" But he put up with any annoyance of the kind very good-humouredly, and he often called the youth "The Philosopher," or "Sir Humphrey," by way of a joke.

During his apprenticeship, Davy very frequently walked over, on a summer's evening, to Marazion, to drink tea with an aunt, to whom he was much attached; on these occasions he usually carried a hammer with him, that he might break pieces from the rocks on the beach, and his pockets were generally loaded with specimens of minerals. The fact was that wherever he went, he went with his eyes open, and he thought nothing in nature too insignificant for his observation. The youth was not rich enough to purchase all the instruments and apparatus which would have assisted his experiments; but being quick in invention, he generally contrived substitutes, though they were sometimes of a very homely kind. Perhaps this early exercise of his ingenuity tended to give him power in adapting means to ends, and was one means of his success. His first original experiment, of any importance, was performed to discover the quality of the air which is contained in the bladders of sea-weed, that he might find out whether sea-vegetables have similar properties for renovating the air over the sea, as land-vegetables have on the atmosphere over the land.

An important circumstance occurred about this time, though it then appeared a very

trifling incident. One day, Humphrey Davy amused himself by swinging over the half-gate attached to his master's house, and as he did so, he threw his face into very odd contortions; he was never very handsome, and these grimaces gave him a singularly droll appearance. Mr. Gilbert, the late president of the Royal Society, chanced to be passing at the time, and he drew the attention of a friend, who was with him, to the extraordinary appearance of the youth. He was told that the lad was Davy, the carver's son, and that he was fond of trying chemical experiments. "Chemical experiments!" Mr. Gilbert exclaimed, "if that be the case, I must have some conversation with him." From that time Mr. Gilbert became his friend; he invited him to his house at Tredrea, and offered him the use of his library; he also assisted him in the pursuit of his studies.

The young chemist was introduced by his new friend to Dr. Edwards, afterwards lecturer on chemistry at St. Bartholomew's Hospital, and that gentleman took him into his laboratory. Davy had never before seen such valuable apparatus, indeed many of the instruments were quite new to him, except as he had seen them represented in engravings; and he was delighted with them. The air-pump, in particular, attracted his attention, and he worked it again and again, and expressed his pleasure with all the simplicity of a child.

When Dr. Beddoes established the Pneumatic Institution at Bristol, he required some

competent person to superintend the experiments in the laboratory; Mr Gilbert proposed Humphrey Davy as a candidate, which appointment he subsequently obtained. He had not served his full time of apprenticeship, but Mr. Borlase generously gave up his indentures on account of his promising talents. Mr. Tonkin was rather displeased with the young man for accepting this appointment, for he had looked forward to his becoming a general practitioner in his native town, and he did not anticipate the honours to which Davy's genius and perseverance afterwards led him. Humphrey Davy quitted Penzance on the 2d of October, 1798. He was then in his twentieth year. He was in high spirits, for though he was parting from his family, to whom he was strongly attached, he was entering the paths of Science, and from boyhood his ambition had been to tread in the higher walks of his profession. "How often, when a boy," he remarked to a friend many years after, "have I wandered about those rocks in search of new minerals, and, when fatigued, sat down upon the turf, and exercised my fancy in anticipations of scientific renown!"

The situation was an honourable one, and just suited to the bent of his genius, but it did not afford an ample salary. As soon, however, as he was in the receipt of a sufficient sum to support himself, he gave up his claim to his father's property for the benefit of his mother and sisters.

The object of the Pneumatic Institution was

to investigate the medical powers of the different kinds of gases which compose the air. Humphrey Davy entered into the various experiments with all the ardour of his nature, and he tried their effects on himself. The results of these experiments he published in essays on heat, light, respiration, &c., in a work titled "Contributions to physical and medical knowledge, principally from the West of England, collected by Thomas Beddoes, M.D.;" Also in a work of his own titled "Researches, chemical and philosophical." Some of the gases had a singular effect on the persons who respirationed them, and our young philosopher, when under their influence, was sometimes seen laughing, stamping, dancing, and shouting. Southey, Coleridge, and others, of graver character, occasionally joined him in these experiments. They had silk bags tied to their mouths to hold the gases, and when they were thus engaged it must have made rather a ludicrous scene to behold these gentlemen in concert, dancing, laughing, and shouting round the room.

Some of these experiments were, however, of a serious nature, and they were all made with the view of discovering important scientific principles.

"If the hopes which these experiments induce us to indulge do not prove fallacious," says Davy, when engaged upon a process for obtaining nitrous oxide from nitre, "a substance which has heretofore been almost exclusively appropriated to the destruction of mankind,

may become, in the hands of philosophy, the means of producing health and pleasure !”

When testing the power of hydro-carbonate, which differs very little from the gas used to light up our streets and public rooms, he nearly lost his life. “There is every reason to believe,” he says, “that had I taken four or five inspirations, instead of three, they would have destroyed life immediately, without producing any painful sensation.”

It is said that a theatre or saloon, lighted with gas, is as oppressive to the lungs as the air which has been rendered impure by the breath of a hundred persons.

Davy at length found his health give way, in consequence of having inhaled so many unhealthy vapours, and he resolved on returning home for the benefit of change of air and rest. He wrote to tell his mother of his intended visit ; and with him, thought and action were so closely allied that, before the post which was to convey the letter went out of Bristol, he was himself on the road to Penzance. He would have reached the place before the letter had he not called on his aunt at Marazion. She persuaded him to stay till the next morning, lest his sudden appearance, together with his pale, worn-out look, should alarm his mother.

The fame of Davy’s experiments reached Count Rumford and other men of science ; and he, in consequence, received an invitation to come to London, and become Director of the Laboratory of the Royal Institution, and their

Assistant Lecturer in Chemistry. From that time, honours were showered upon him, in quick succession. He soon dropped the title of assistant, and became chief lecturer. The Theatre of the Royal Institute was crowded by men of rank, science, and literature; and even by ladies of fashion, eager to hear him. His society was courted by the great. Handsome presents were sent him, and he was flattered on every side.

One great charm was his natural eloquence and the simplicity and warmth of his manners; but, unhappily, after his introduction into the fashionable circles, he lost much of that native simplicity. He put on the mode of dress and airs of a man of fashion, and became such a favourite in high life, that no soirée was thought complete, if he were absent. But what he gained in adulation, whilst mingling among the polite, he lost in respect from those whose opinion was worthy of regard. His best friends watched his career with intense interest, for the change in his manner was noticed by many. Whilst condemning the weakness which induces a man to catch at the glittering bauble of fashionable notoriety, which, like the ephemera, lives but for a day, we must remember that Humphrey Davy was then but two-and-twenty, and that it is often more difficult to bear the full blaze of prosperity, than the dark stormy night of adversity. Many a man who has nobly pressed onward, in the face of poverty and discouragements of almost every kind, has lost his moral

courage, and sunk to a level with common minds, when exposed to the influences of flattery or wealth; so that those who excited our admiration in the race, claim from us a tear, when they arrive at the goal. Why is this? It is because such individuals forget that all their powers, both of body and mind, are the gift of God; and they do not exclaim with the Psalmist, "Hold up my goings in thy paths, that my footsteps slip not."

Coleridge, when writing to a mutual friend, thus alludes to Davy's peculiar position—"I rejoice in Davy's progress," he says. "There are three suns recorded in Scripture, Joshua's, that stood still; Hezekiah's, that went backward; and David's, that went forth and hastened on his course, like a bridegroom from his chamber. May our friend's prove the latter! It is a melancholy thing to see a man, like the sun in the close of the Lapland summer, meridional in his horizon; or like wheat in a rainy season, that shoots up well in the stalk, but does not *kern*. As I have hoped and do hope more proudly of Davy than of any other man; and as he has been endeared to me more than any other man, by the being a Thing of Hope to me (more, far more than myself to my own self in my most genial moments)—so of course, my disappointment would be proportionably severe. It were falsehood, if I said that I think his present situation most calculated, of all others, to foster either his genius, or the clearness and incorruptness of his opinions and moral feeling. I see two serpents at the cradle

of his genius, dissipation with a perpetual increase of acquaintances, and the constant presence of inferiors and devotees, with that too great facility of attaining admiration which degrades ambition into vanity—but the Hercules will strangle both the reptile monsters.”

Humphrey Davy still continued his duties in the laboratory and the lecture room, and his investigations were directed towards subjects of general utility. One of his courses of lectures was on the chemical principles of the art of tanning; and respectable persons in the trade, who could be recommended by the proprietors of the institute, were admitted to these lectures free. Another was on the chemistry of agriculture. In the introductory lecture to the latter course he says—

“Agriculture, to which we owe our means of subsistence, is an art intimately connected with chemical science; for, although the common soil of the earth will produce vegetable food, yet it can only be made to produce it in the greatest quantity, and of the best quality, by methods of cultivation dependent on scientific principles.

“The knowledge of the composition of soils, of the food of vegetables, of the mode in which their products must be treated, so as to become fit for the nourishment of animals, is essential to the cultivator of land; and his exertions are profitable and useful to society, in proportion as he is more of a chemical professor. Since, indeed, this truth has been understood, and since the importance of agriculture has been

generally felt, the character of the agriculturist has become more dignified, and more refined; no longer a mere machine of labour, he has learned to think and to reason. He is aware of his usefulness to his fellow-men, and he has become, at once, the friend of Nature, and the friend of society."

Mr. Davy's lectures on this subject were so highly esteemed, that the Dublin Society requested him to come over and repeat the six lectures which he had delivered before the Board of Agriculture, on the application of chemistry to agriculture, for the benefit of the "Farming Society of Ireland." The following resolutions, which were passed by the society at an after meeting, show that they were willing to pay him for his information.

"Resolved, that the thanks of the Society be communicated to Mr. Davy for the excellent course of lectures which, at their request, has been delivered by him in their laboratory; and to assure him that the views which led the Society to seek for these communications, have been answered even beyond their hopes;—that the manner in which he has unfolded his discoveries has not merely imparted new and valuable information, but farther appears to have given a direction of the public mind towards chemical and philosophical enquiries, which cannot fail in its consequences to produce the improvement of the science, arts, and manufactures of Ireland."

"That Mr. Davy be requested to accept the sum of five hundred guineas from the Society."

The following year he received another invitation from the Dublin Society, and after delivering two courses of lectures, one on the elements of chemical philosophy, and another on geology, they presented him with the sum of seven hundred and fifty pounds. A very substantial proof that his lectures were highly esteemed. They also presented him with the honorary degree of LL.D.

Mr. Davy, soon after his arrival in town, became acquainted with Thomas Bernard, a benevolent and public-spirited man, who was instrumental in founding several of our charitable institutions. This gentleman allowed the young chemist to have the sole direction of a large piece of ground on his estate near Roehampton, and the experiments which he tried there greatly assisted him in the study of agricultural chemistry.

Mr. Davy's scientific fame attracted the notice of the Prince Regent, who conferred on him the honour of knighthood, on the 8th of April, 1812. Three days after, on the 11th, he married a lady of considerable fortune, so that he was then in the possession of both wealth and rank.

The following June, Sir Humphrey Davy published a work on "The Elements of Chemical Philosophy." This he dedicated to his wife, as a pledge, he said, that he would "continue to pursue science with unabated ardour." As our little volume does not pretend to treat on science, our object being to draw out principles from the lives of men,

who have risen to eminence by their own genius and exertions; we must pass over much that is interesting in the life of Sir Humphrey, because it is the interest connected with his experiments. We will, however, just glance at his valuable discovery of the safety-lamp.

The importance of this invention can only be estimated by considering the evils which it was designed to remedy. In working coal mines, as the pitmen loosen the coal, or with their picks make crevices in it, the coal throws out a large quantity of hydro-carbonate, which is a mixture of hydrogen gas and carbon. This gas which the miners call fire-damp, is liable to explosion when a lighted candle is brought near; and it is sometimes so mixed with the common air, that the whole mine is filled with an atmosphere of fire-damp. When such is the case, on the approach of a candle the air is instantly in a flame. This flaming air spreads rapidly, roaring like a whirlwind driving everything before it, and scorching the unhappy miners to a cinder. It causes a general explosion, throwing up into the air coal-dust, stones, pieces of timber, and everything else it comes in contact with. Accidents of this awful nature were of frequent occurrence, and though many experiments had been tried, no means had been discovered by which the coal mines could be lighted with safety. A gentleman named Wilkinson, a barrister in London, proposed that a society should be established for the humane purpose of enquir-

ing whether plans could be adopted which would prevent accidents of this nature in the collieries. This suggestion led to a society being formed in October, 1813.

The committee stated their object to Sir Humphrey Davy, and asked him to direct his attention to the subject. This he did very cheerfully, and the benevolent nature of the enquiry induced him to enter into it with even more than his accustomed energy. His first investigation was into the nature of fire-damp, that he might ascertain what substances he would have to accommodate himself to. He discovered that heat alone would not ignite the fire-damp.

“Red-hot charcoal,” he says, “made so as not to flame, if blown up by a mixture of the mine-gas and the common air, does not explode, it but gives light in it: and iron, to cause the explosion of mixtures of this gas, must be red-hot.”

The discovery of these properties in the gas led to the adoption of a simple wire gauze sieve, or lantern, which, by protecting the flame, prevented the possibility of its kindling the fire-damp. Sir Humphry Davy, in a letter to Dr. Gray, the gentleman who first drew his attention to the subject says:—

“I have made very simple and economical lanterns, and candle-guards, which are not only *absolutely safe*, but which will give light by means of the fire-damp, and which, while they disarm this destructive agent, make it useful to the miner.

"This discovery is a consequence of that which I communicated to you in my last letter on the wire sieve. I hope to be able to send you, on Wednesday, the printed account of my results, together with models of lamps which will burn and consume all explosive mixtures of the fire-damp."

This simple construction was found to answer the design of the inventor, and the Davy safety-lamp has been extensively useful in the preservation of human life. It has proved equally valuable in spirit warehouses, gas manufactories, and other places where the atmosphere is rendered explosive. But now we must refer to a very painful contention which arose, as to whether Sir Humphrey Davy were entitled to the honour of the first invention, or whether it belonged to George Stephenson, an engine-wright, of Killingworth.

Justice seems to demand that equal credit should be given to both gentlemen, as both were evidently influenced by a benevolent desire to save the lives of their fellow-men. They were led to consider the subject at the same time, and they seem to have arrived at somewhat similar conclusions, though their opportunities for becoming acquainted with the subject were very dissimilar. Humphrey Davy had a thorough knowledge of scientific principles, of the elements which compose the various gases, and their action on each other. George Stephenson's knowledge was acquired under the stern teaching of experience.

We believe that Sir Humphrey Davy was sincere, when he made the following remark, "I have never received so much pleasure from result of any of my chemical labours; for for, I trust, the cause of humanity will gain something by it;" yet, we are sorry to say, that he spoke of Stephenson's invention in a manner which was alike ungenerous and unworthy of the benevolent object in which both were engaged. We would gladly have passed over this controversy without noticing it, for it is a far more pleasing task to point out the virtues of an individual than to draw attention to his faults; but our object is not to please only, but to instruct also and to state facts.

On the 25th of September, 1817, a public dinner was given at Newcastle, by the coal-owners, to Sir Humphrey Davy, and a valuable dinner service of plate was then presented to him, as a testimony of their gratitude for the invention of his safety-lamp.

One day, after walking with a friend through a coal mine, to see the effect of his new invention, Davy's companion remarked, "You might as well have secured this invention by a patent, and received your five or ten thousand a-year, from it." "No, my good friend," was Sir Humphrey's generous reply, "I never thought of such a thing; my sole object was to serve the cause of humanity; and, if I have succeeded, I am amply rewarded in the gratifying reflection of having done so." On another occasion, and when speaking to another friend on the subject, he said, "I value it more than

anything I ever did. It was the result of a great deal of investigation and labour; but if my directions be only attended to, it will save the lives of thousands of poor labourers. I was never more affected," he added, "than by a written address, which I received from the working colliers, when I was in the North, thanking me, in behalf of themselves and their families, for the preservation of their lives."

Sir Humphrey Davy presented one of his safety-lamps to the Emperor Alexander of Russia, as a model for the use of his subjects. His Majesty was much pleased with it, and desired his ambassador to thank Sir Humphrey in his name for it; and he, at the same time, sent him a beautiful silver gilt vase, standing in a tray, adorned with medallions. A figure sixteen or eighteen inches in height, intended to represent the God of Fire weeping over his extinguished torch, was placed on the cover of the vase. This present was valued at one hundred and eighty guineas. In consideration of the general utility of the safety-lamp, which was regarded as a national benefit, the government presented Sir Humphrey Davy with a Baronetcy. Fresh honours awaited him also in the world of science, for the President's chair of the Royal Society was soon after vacant by the death of Sir Joseph Banks, and Sir Humphrey Davy was elected to fill it. Constant mental labour, however, together with a feeling of disappointment, which was caused by the failure of some experiment he had tried for

protecting the copper sheathing of ships from the action of sea water, brought on a lingering illness from which he never recovered.

As an amusement for his hours of languor Davy wrote two works, one titled "Salmonia," which treats principally on Angling, of which he was particularly fond ; and the other, called "Consolations in Travel ; or, the Last Days of a Philosopher." We extract the following from the last-mentioned work :—

"I envy," he says, "no quality of the mind or intéllect in others, be it genius, power, wit, or fancy : but if I could choose what would be most delightful, and, I believe, most useful to me, I should prefer a firm religious belief to every other blessing ; for it creates new hopes, when all earthly hopes vanish ; and throws over the decay, the destruction of existence, the most gorgeous of all lights, where the sensualist and the sceptic view only gloom, decay, annihilation, and despair."

Then, after speaking of a hero dying in the arms of victory, he says :—

"I consider the death of the martyr, or the saint, as far more enviable. In such cases, man rises above mortality, and shows his true intellectual superiority. By intellectual superiority, I mean that of his spiritual nature ; for I do not consider the results of reason as capable of being compared with those of faith. Reason is often a dead weight in life, destroying feeling, and substituting, for principles, calculations and caution ; and, in the hour of death, it often produces fear or despondency, and is

rather a bitter draught in the last meal of life."

"The immortal being never can quit life with so much pleasure as with the feeling of immortality secure, and the visions of celestial glory filling the mind, affected by no other passion than the pure and intense love of God."

We must now pass on to the time when the writer's own principles were to be tested by the ordeal of a dying bed.

Sir Humphrey Davy paid a visit to the continent with the hope that a milder atmosphere would restore his health. He had before made several tours on the continent for the purpose of scientific research, but now he went over there to die. He suffered a second paralytic seizure whilst at Rome, in which place he had spent several months. Lady Davy, who was in London, was immediately made acquainted with her husband's danger, and urged by affection she made so rapid a journey that she reached his side in little more than twelve days. The invalid slightly recovered, and with the restlessness of disease he wished to be removed from Rome; he desired to go to Geneva, and Lady Davy, who was anxious to gratify his wishes as far as possible, made arrangements for the journey. She went each stage before him that she might order every thing to be prepared which would conduce to his comfort.

On the 28th of May, 1829, Sir Humphrey Davy arrived at Geneva at about three in the afternoon. He then appeared rather better

and more cheerful than usual. He did not retire to rest until nearly twelve o'clock ; but a short time after, the friends who were journeying with him were summoned to his bedside, and before three o'clock in the morning he was a corpse.

His biographer, Dr. Paris, to whom we are principally indebted for the facts contained in this sketch, does not tell us anything of the religious state of his mind in a dying hour : we can only hope, therefore, that the faith he spoke of, and the "firm religious belief," which he declared to be more desirable than every earthly blessing, was faith on the Lord Jesus Christ, for "there is none other name under heaven given among men, whereby we must be saved." Acts, iv. 12.

Davy's funeral was a public one. It was attended by the magistrates of the Republic of Geneva ; the professors and students of the college ; the English residents, and many of the citizens ; for all were conscious that Science had lost one of her brightest ornaments, and his death was regarded as a public loss. He was buried in the cemetery at Geneva ; a tablet to his memory has since been placed in Westminster abbey.

Sir Humphrey Davy was highly gifted by nature, being possessed of a mind capable of taking a wide range of thought. His perceptions were quick and clear, and he had the power of bringing down abstruse scientific principles to the understanding of all. But these were natural endowments—talents lent

him by his Lord to be improved for His service.

His industry was unwearied; indeed, without industry, his genius would have been of little avail. His zeal in scientific research remained undaunted under discouragements which would have induced many to give up the pursuit in despair; moreover, as we have seen, his health suffered from the experiments he tried. His affections were strong and abiding, both towards those who were bound to him by kindred ties, and towards his friends. And he appears, from his letters, to have cherished feelings of gratitude towards those persons who had assisted him in his early struggles.

But we must not be understood to hold up Sir Humphrey Davy as a perfect model for imitation, though there were so many excellent traits in his character. He was injured by prosperity. When he had once merged from the retirement of a studious life, and mixed among the high born and wealthy, he was not even satisfied with honours won in the scientific world, but he coveted the distinctions of rank. "An inordinate admiration of hereditary rank was the cardinal deformity of Davy's character," says his biographer. This showed weakness of mind, which we should scarcely have expected from one capable of relishing intellectual pleasures. It shows, also, that those individuals who indulge in ambition, of whatever character it may be, will always have something beyond their reach to pine after.

Man, born for immortality, and with a capacity to love and serve God, cannot be really satisfied with anything which does not include his spiritual nature.

WILLIAM ALLEN,**PHILANTHROPIST.**

THE name of William Allen stands high among the enlightened and public spirited men of modern times ; and, to him we are indebted for many of the noble institutions which are the glory of our age. Wide spread, however, as were his works of benevolence, and deep as were his scientific researches, his name is but little known. And when reference is made to the founder of certain charities " Who was William Allen ? " is the general enquiry. We will endeavour to answer the query, for his life teaches a useful lesson, and his example is not the least of the benefits he has conferred on the world.

William Allen was born on the 29th of August, 1770 ; he was the son of Job Allen, a silk manufacturer in Spitalfields. His father, a worthy man, and a member of the Society of Friends, was in a comfortable line of business,

but by no means wealthy; and he could not afford to give his son William these advantages of education, which, to a youth of his promising abilities, appeared peculiarly desirable.

William Allen's taste and desires from childhood were towards scientific pursuits; but as his father wished him to be associated with himself in the silk business, he regarded that as the path of duty, and followed the calling with diligence and attention till his twenty-second year. An uncongenial employment has sometimes the effect of damping the energies and producing recklessness of spirit. Some young men think, that if the bent of their genius or inclinations are opposed, they cannot hope for success in any other pursuit, and therefore they do not make the best of their present position and try. A little reflection, however, would shew the folly of such a line of conduct. Those persons who have been placed in circumstances which call for self-denial, and who have acted on the principle, testify that there is a delightful satisfaction in the consciousness that we are in the path of duty, even though it be a rugged and painful path. And it is sometimes the case that Providence, in an unlooked-for manner, opens a way to the very course we desire. "Commit thy way unto the Lord; trust also in him; and he shall bring it to pass."

William Allen, though actively employed in business, found opportunities for study. When fourteen years of age, we find him constructing a telescope, to assist himself in the

study of astronomy, but not being, as he expressed it, "strong in cash," he contrived to make an instrument with a sheet of pasteboard, for tubes, an eye-glass, and an object-glass, which altogether, cost him only fourteen pence. Homely as was the manufacture of this telescope, he adjusted the glasses so skilfully, that the satellites of Jupiter could be seen through it, and it became a source of improvement to him, as well as pleasure. Chemistry was, however, his favourite study; and, when quite young, he made frequent experiments in that science.

In 1792 Mr. Joseph Gurney Bevan, of Plough Court, Lombard Street, London, became much interested in young Allen, and took him as a junior partner into his chemical establishment. He entered upon his new duties with all the ardour which was natural to his character, and success attended his labours. Indeed, his general conduct awakened so much confidence in his prudence and ability that three years after, Mr. Bevan retired, leaving him to superintend the business. Allen's diligence in his profession did not, however, prevent his directing his attention to general science, nor obstruct the warm out-goings of his earnest philanthropy.

He first became a pupil, then a teacher. In the year in which his connection with Mr. Bevan began, he entered himself as physician's pupil at St. Thomas's Hospital, and a few months after, he was elected a member of the Physical Society at Guy's Hospital. In his

Diary, about this time, we find the following entry among others equally characteristic :—

“Went to the Hospital ; received the thanks of a poor sick patient, which did me more good than a guinea fee !”

Shortly after, we hear of him in connection with W. H. Pepys, Joseph Fox, and a few others, forming a Philosophical Society, now called “The Askesian Society, for exciting habits of Inquiry, and Accurate Investigation.” For twenty years he devoted his energies to this cause. He was one of their lecturers, and he frequently speaks in his diary of sitting up all night, to prepare lectures and to make experiments. About the same period, William Allen commenced an intimacy with Clarkson. Plough Court was frequently the home of that philanthropist when he was in town, engaged in his glorious mission for the abolition of the slave trade ; and the unity of feeling which subsisted between the two, cemented a friendship which continued for half a century. He formed a friendship, too, about that period, of a still more endearing nature, with a certain “dear Mary Hamilton,” of whom frequent affectionate mention is made in his Journal.

He married this lady on the 13th of November, 1796 ; and he writes, some months after, that she is the “dearest companion,” and greatest earthly comfort, he enjoys. We now see him happy and prosperous ; his duties were his delight, and domestic love shed its hallowed influence on his path. His actions were

regulated by right principles, for he had commenced the year with these resolutions:—

“Resolved to endeavour, by all means, to acquire more firmness of character, and more indifference to what even my nearest friends may think of me, in the pursuit of what I believe to be right; to do nothing to be seen of men; to avoid every species of craft and dissimulation, and to spend more time in my own room, in reading and retirement.”

His conjugal happiness was, however, of short duration; for, ten months after his marriage, he was separated by death from his amiable partner: she died, leaving him a daughter only five days old. This was a grief which, with Allen's sensitive mind, might have pleaded for a season of self-indulgence, but his character was so thoroughly generous, that he could not be selfish even in sorrow. The melancholy event, for a time, unhinged him for his favourite scientific pursuits, but his sympathies for the distressed were quickened into greater activity.

In the autumn of 1797, he, together with William Phillips, formed what was long after known as “The Spitalfields Soup Society,” and, in the following spring, his name appeared on a list of the committee of “The Society for Bettering the Condition of the Poor.” Societies for such objects must effect a vast amount of good under any circumstances, but they must have been peculiarly beneficial at that time, when bread was sometimes as much as seventeen pence halfpenny the quartern loaf,

and all other kinds of provisions were equally dear. Nor was Allen's benevolence confined to public charities, he was daily to be seen entering the abodes of misery, and devoting himself to other labours of love.

His ardour in the pursuit of science was only checked for a season, for two years after he returned to his laborious investigations with fresh vigour. It is not generally wise for a young man who is anxious for success in one particular department of science, to divide his attention among others; but we can scarcely quarrel with William Allen, though we find him one day with Astley Cooper and Dr. Bradley trying* experiments in respiration, which by the way had once well nigh cost him his life; another with Humphrey Davy, making discoveries in electricity; on a third, freezing quicksilver with muriate of lime, &c., with his friend Pepys; and on the following with Dr. Jenner and others, making observations on the cow-pox. About this time too, he entered rather deeply into the study of botany, gained some knowledge of drawing, engaged a tutor to assist him in mathematics, improved himself in French and German, and made further observations in astronomy, besides aiding in the formation of geological and mineralogical societies, and becoming a member of the Board of Agriculture, where he gave frequent lectures. His public engagements were indeed so numerous, that we can only glance at them.

In 1803, William Allen was elected one of the presidents of the Physical Society at Guy's

Hospital, where he was before a lecturer on chemistry, together with the well-known Dr. Babington ; and by the advice of some of his friends, he accepted an invitation from the Royal Institution, of which he was a member, to become one of their lecturers. It is said that in one year, he delivered as many as one hundred and eight lectures, in addition to his other engagements.

Twelve years before, the studious young man of two-and-twenty was following his father's business with diligence and attention. Now we see him, when he has almost reached the pinnacle of fame, with wealth and honours lying temptingly before him. It was a situation of peril ; happily, however, he was aware of the danger, and sought strength where none ever sought in vain. " If," he says, " I am preserved from falling a victim to the world, its honours, and its friendships, I shall be inclined to consider it a miracle of mercy. O, that my feet were permanently fixed on the sure foundation, even Jesus Christ !" His mother's influence was very beneficial at this season. She was a woman of good sense and enlightened piety, and she was capable of advising him as to the right course to be pursued. Some very beautiful letters of hers written at this period, are preserved and given in Allen's biography. She was not insensible to the honours and advantages which his genius and perseverance promised to gain for him, yet she entreated him to consider the necessity of setting himself more at liberty. " Thou art

too much absorbed in study, my beloved child," she says, "for, however innocent it may be, yet, like the doves in the temple, it fills up a place in the temple of thy heart, which ought to be otherwise occupied and dedicated to the Lord, in whose hands thou wouldest become an instrument to promote the knowledge of pure Christianity. *Come, my beloved, if a right hand, or a right eye be called for, give it up*—the Lord loves a cheerful giver, and he will restore thee an hundred fold."

William Allen's love for his mother partook somewhat of the spirit of romance; arising, perhaps, from the fact, that they were both ardent and energetic. Independently, however, of this similarity in character, he was deeply sensible of the duty and affection which is due from a child to a parent; and filial piety was one of the finest traits of his character.

The letters we refer to were kept in his pocket-book for future perusal, and they often refreshed his spirits and rekindled his energy, in seasons when he was oppressed by the cares and toils of public life.

William Allen's name appeared first on the list of the committee for the abolition of the slave trade in 1805; though it was a subject which had engaged his notice, and called forth his warmest sympathies even from his boyhood. His large heart recognised the claims of "a man and a brother," in every human being, however low he might be sunk in ignorance or vice; and in the true spirit of Christianity he strove to form plans for enlight-

ening, relieving, and reclaiming them. William Allen's energies were also directed towards a reformation in the criminal code, especially on the subject of punishment by death, which even so lately as at that period was inflicted for slight offences. Seven gentlemen dined together at his house in Plough Court, in July, 1808, and formed themselves into a society for carrying out this object. Their efforts were unwearied in the cause; nor did they labour in vain. "To reform the guilty," said William Allen, when writing to Lord Sidmouth on behalf of a poor man who was under sentence of death for a trifling theft, "and to restore them as useful members of the community, is a glorious triumph of humanity, and marks a state rising in the scale of civilization; but to have no other resource than the punishment of death, reminds one of the miserable subterfuge of a barbarous age, barren in expedients to save, strong only to destroy."

Schools for the children of the poor were another subject of interest to our philanthropist. Joseph Lancaster had a short time before started his system for instructing a large number together by the aid of monitors. Lancaster's affairs were then sadly embarrassed, for the want of means to carry out his design on the enlarged scale which his benevolence induced him to aim at, and in 1808, the business was placed in the hands of trustees.

Mr. Allen sympathised in the plan, thinking it one likely to be of public service, and he became treasurer to a society formed on Lan-

caster's model, called the British and Foreign School Society. This undertaking demanded much time and labour, and involved the gentlemen who had generously come forward as a committee in much vexation and trouble. They had not only to raise money to pay debts already contracted, and furnish sums for the extension of the plan, but to work on through public prejudice and private misrepresentation. It may be remarked, however, that most improvements, whether moral or political, meet with some opposition in the onset. Allen says, "of all the concerns I have any thing to do with, the Lancasterian lies the most heavily on my mind." This school business brought him into frequent communication with different members of the royal family, who had become its patrons; amongst others, the Duke of Kent; his royal highness conceived such a strong regard for the simple Quaker, that he ever after treated him as a confidential and attached friend.

In 1813 we find Allen carrying out fresh plans of utility in the erection of Savings' Banks. From the same kind motive—a desire to improve the condition of the poor—he was induced by the solicitation of friends to unite himself with the well-known Robert Owen, with the view of carrying out the plans of the latter at New Lanark. The articles ran thus:

"That nothing shall be introduced to disparage the Christian religion, or undervalue the authority of the Holy Scriptures; that no books shall be introduced into the library until

they have first been approved of at a general meeting of the partners ;" and " that children shall not be employed in the mills, until they shall be of such an age as that labour shall not be prejudicial to their health." Notwithstanding these wise regulations, William Allen suffered much distress of mind, lest the infidel opinions of the founder should be adopted by the people under his care, which numbered about three thousand. He tried, by every means in his power to convince Mr. Owen that he was in error. He wrote long letters to him on the subject of religion ; he argued, he entreated, but all in vain ; and after ten years of anxiety, he broke off a connection which, to use his own words, had " rendered him miserable."

" Alas !" he says, " Owen, with his cleverness and benevolence, wants the *one thing* without which, parts and acquirements and benevolence are unavailing."

On the 13th of February, 1814, Mr. Wilberforce called upon Mr. Allen to interest himself for the Lascars and Chinese ; and asked, if he and his friend Clarkson could not do something for them. Such an appeal was not likely to be made in vain, and whatever Allen's hand found to do, he did with all his might. He immediately started on the errand of mercy, and having obtained permission to visit the barracks at Ratcliffe, where two hundred of those unfortunate individuals were then lodged, he made the necessary inspection, and at once formed plans for their relief.

The day following, he made this entry in his Journal :—" To Wontner's, at the Minorities ; Lascars' Society founded."

We next find him uniting himself with the Peace Society. When the Allied Sovereigns visited London in 1814, on the occasion of the general peace, a deputation from the Society of Friends waited on those royal personages with addresses expressive of their opinions with regard to war. The address for the Emperor of Russia was sent to Count Lieven ; and, on the day following, Mr. Allen, who was one of the deputation, waited on that nobleman to make arrangements for its presentation.

Greatly to his astonishment, instead of the ceremonious reception he anticipated, he found the count waiting for him in his carriage.— Having invited him to enter it, he told him that the emperor had expressed a desire to attend a Friends' Meeting, and proposed that they should embrace the present opportunity. They therefore drove off to Nesselrode's where the emperor then was. Being joined by Alexander of Russia, the Grand Duchess of Oldenburgh, the Duke of Oldenburgh, and the Duke of Wurtemburgh, they accordingly rode together to the nearest meeting-house then open for devotion. As no previous notice had been given to the good people, they were, doubtless, much surprised, but there was no commotion, and the titled strangers were politely shewn to their respective seats. When the meeting broke up, the royal visitors expressed them-

selves pleased, and after shaking hands with the Friends they departed.

Allen's ever active mind next projected an institution for the reformation of juvenile offenders. In the midst of these engagements, he edited a journal called "The Philanthropist," just the title we should fancy such a man would choose; and it breathed his own loving spirit, for the object of the work was to shew that each individual may, in some measure, alleviate the sufferings of his fellow-creatures, and add to the amount of human happiness.

In 1816, he entered on a new and very important sphere of usefulness, which was, visiting the different European countries, for the purpose of ascertaining from personal investigation the state of their prison discipline, and also for examining into the subjects of national education, the condition of the poor, and liberty of conscience. He does not appear to have, at first, contemplated the extent of his mission, but to have been led on by witnessing the need of such enquiries. He set out on his first journey with the kind motive of taking care of some female friends, who had business to attend to on the continent. Having crossed the Straits to Calais, they passed through Belgium and Holland into Germany and Switzerland. At Geneva, Mr. Allen experienced a severe shock in the death of his wife; for he had married a second time. She was buried in the cemetery at Sacconet. He felt her loss very severely, for they had been united ten years; and during that time, she had com-

forted and cheered him in his anxieties and toils. In consequence of this trouble he returned home.

A second journey was, however, commenced in August, 1818, which occupied him until 1820. He this time visited Northern Europe ; part of Turkey, Greece, and Malta, in company with Mr. Stephen Grellet.

After investigating public institutions, and ascertaining the state of the country generally, these gentlemen proceeded to the various courts, and made known their observations, at the same time suggesting such improvements as were deemed necessary to the case. In most instances they were well received, though they sometimes had to contend with strong opposition from individuals who thought knowledge too powerful an agent to be trusted in the hands of the mass. Mr. Allen brought forward arguments showing the fallacy of such an idea, proving that ignorance is an insurmountable barrier to the progress of morality and civilization. He also strongly maintained the rights of conscience, asserting that "the business of civil governors, is the protection of the people in their rights and privileges, and that they have nothing to do in matters of religion, provided that the good order of the community be not disturbed."

The first mission of the friends was to Norway, and from thence they passed into Sweden. At Stockholm they had a private interview with the king, whom they addressed on the important subjects of prison discipline, manage-

ment of the poor, and education. Their reception at the court was kind and cordial, and the privileges they asked were all granted to the people.

As the parting between the Swedish Sovereign and the stranger Friends was rather uncommon, we will give the account from Mr. Allen's diary.

"While I was holding his hand to take leave," he says, "in the love which I felt for him I expressed my desire that the Lord would bless and preserve him. It seemed to go to his heart, and he presented his cheeks for me to kiss, first one, then the other; he took the same leave of Stephen and Enoch, [friends who were with him,] and commended himself to our prayers."

The party then embarked for Finland, where they were also successful in bettering the condition of the prisons. From this place they journeyed to St. Petersburg. The emperor was absent when they arrived at the Russian capital, but they were kindly received by the royal family and the court.

Alexander returned shortly after; and he now showed that his professions of regard when in England were sincere, by receiving them without ceremony, and by treating them with the warmth and confidence of friendship.

The following spring the two gentlemen left St. Petersburg for Moscow, and after passing through Tartary and Greece, they returned home through Italy and France.

Mr. Allen gives the following pleasing de-

scription of the interior of a Russian palace in winter:—

“The large room has a very lofty ceiling, and is just like a shrubbery. There are some fine tall trees in boxes, and very pretty trellis-work covered with a beautiful creeper from New Holland; the plants are all evergreens, and in a healthy, flourishing state. Among them are cages of singing-birds, some of which are of magnificent plumage; and there was one pair of Indian sparrows. Their stoves, and their universal system of double windows, keep up a uniform and very agreeable temperature throughout all the apartments, and even passages, of a Russian house. The princess's apartment is so large, and so much divided by shrubs and trellis-work, that two or three parties might converse at the same time, without interrupting each other.”

A third journey, in 1822, was undertaken, principally for the purpose of interesting the Emperor Alexander in the abolition of slavery, and to plead the cause of the poor Greeks.—Mr. Allen had two interviews with his majesty, at Vienna, and the emperor entered warmly into his benevolent projects. Alexander was himself going to Verona, and he urged our philanthropist to visit that place. Here they again met—met for the last time on earth.—The parting was touching; for difference of station, and the formalities of a court, were overlooked in the warm, gushing feelings of unity of heart. They continued in conversation for several hours, being—to quote Mr.

Allen's own words—"loth to part. It was," he goes on to say, "between nine and ten o'clock when I rose. He (the emperor) embraced and kissed me three times, saying, 'Remember me to your family; I should like to know them. Ah! when and where shall we meet again?'" They have doubtless met in a happier world.

William Allen not only publicly avowed his hatred of war, but acted out his principles when a contrary course would have contributed greatly to his pecuniary advantage. The Emperor Alexander made him the offer to supply his army with drugs, which offer he firmly, but gratefully refused, though it was pressed upon in him friendship. The Royal Society, when making known this act of self-denial, remarked "To his honour, be it spoken he resisted a temptation, the value of which it would be difficult to estimate."

Mr. Canning had desired the British minister at Turin to make inquiries into the real state of the Waldenses, who were then suffering severe persecutions. Mr. Allen, who, on leaving Verona, had proceeded to Turin, agreed to accompany that gentleman into the valleys; and in consequence of the report they gave, some important privileges were granted.

Mr. Allen made fourth and fifth tours in the years 1832 and 1833, but our space will not permit us even to glance at them.

Though so fully occupied abroad, he had still an eye to home improvements; and during the intervals between these journeys. he followed

the same routine of useful labour. He did not discontinue his lectures at Guy's Hospital until the year 1826. Those lectures were very useful to the students, not only on account of their scientific information, but as they were based on the truths of the Bible.

His farewell address, on leaving, was printed and widely circulated; but it is so beautiful and appropriate, that it deserves to be still more extensively spread, especially amongst medical students."

"*Can I*," he says, when speaking of God's goodness as displayed in the material world, "forbear to advert to that greatest of blessings which, in His infinite love, He has bestowed upon us by the coming of the Son of God in the flesh? Ought I to refrain from speaking out boldly upon subjects of such unspeakable importance? I know that the views which I take are, unhappily, in some quarters, not very fashionable; that they are very humiliating to that philosophical pride which spurns at everything beyond the comprehension of its limited capacity; but how far this is just or reasonable, or really philosophical, we shall presently examine!"

We cannot go through the arguments, but we recommend the reader to examine the question for himself.

Mr. Allen established a School of Industry at Lindfield, near Brighton; and, in conjunction with the late John Smith, M.P., he, in the same neighbourhood, made trial of a plan which had long occupied his thoughts. This

was a cottage society for bettering the condition of the agricultural labourers. It was afterwards called, "The Society for Improving the Condition of the Labouring Classes," and it effected much good.

During the latter years of his life he spent much time on this spot. It was a quiet retreat from the bustle and fatigue of public life; but even such seasons were not spent in uselessness, for he wrote several tracts here on subjects of general improvement, and carried on the above-mentioned plans, of the success of which he was very sanguine.

In 1823 Mr. Allen was deeply afflicted by the death of his only child: he speaks of her as his dearest earthly treasure, in whom his tenderest affections were concentrated. But like the patriarch of old, he was enabled to say, "The Lord gave, and the Lord hath taken away: blessed be the name of the Lord."

To rightly judge of the character of an individual, we must see him not only in public acts, but also in private life. That liberality which is only performed to be seen of men is not genuine. William Allen was an example of benevolence and kindness in every relation of life. His heart, which glowed so warmly for the whole human family, beat with increased intensity for all who came within the hallowed influence of home.

Several years after his daughter's death, he married an amiable widow lady belonging to the Society of Friends. This union tended to

gild his declining days, but eight years after, he was a third time left a widower.

When upwards of seventy years of age, he was obliged, from weakness, to discontinue those labours, which so long had been his delight; but, to avoid the temptation to impatience, which is often felt, after a life of activity, as well as with the benevolent view of being useful, he endeavoured to make acquaintance with all the young people in his neighbourhood. He then devoted a considerable portion of his time to their instruction and amusement, having fixed evenings for the purpose. Thus like the setting sun, he shed light and beauty to the last. His health declined gradually, and his death, which was peaceful, took place on the 30th of December, 1843.

On taking a review of William Allen's useful life, we are astonished at the amount of labour he was enabled to perform. But to solve the mystery, he never lost time. He marked out his work, so that no time was spent in considering what should be done next. By this method, he was able to give to each duty its due share of attention. His generosity was not a mere impulse, he did not take up a cause under excited feelings, and drop the interest, when some fresh object engaged his attention. His benevolence was genuine and consistent, but his exertions for the benefit of his fellow-creatures sprang from a desire to do the will of God. This the following passage from his private journal fully testifies.

"I can humbly say," he writes, "in the multitude of things which harass my mind, the main object is the good of others ; for this, I have, in a great measure, given up my own gratification ; for if, instead of these things, my time were devoted to philosophical pursuits and experiments, to which I am naturally so prone, the path to honour and distinction stands fair before me. May the sacrifice be accepted above !"

Few have risen to the honours, and fewer still to the usefulness which William Allen attained. Talent and fortunate circumstances aided his progress, but the secret of his success may be traced, we think, to his enlightened piety, his steadiness of purpose, and his unwearyed industry.

WILLIAM HUTTON,

**AUTHOR OF "HISTORY OF BIRMINGHAM," AND OTHER
VALUABLE WORKS.**

THE subject of this sketch was born in the manufacturing town of Derby, September 30th, 1723. His father was a wool-comber and very poor, but his poverty seems to have been principally owing to his intemperate habits. There was a large family, and but for the tender and self-denying kindness of the mother, the poor children would have been brought up in the greatest possible wretchedness. Speaking of his early childhood, Hutton, in an autobiography which was published after his death, says, "My poor mother, more than once, one infant at her knee, and a few more hanging about her, have all fasted a whole day, and when food arrived, she has suffered them without a tear to take *her* share. Time," he adds, "produced nothing but tatters and children."

When about three or four years old, William was sent to reside alternately with a bachelor uncle and three maiden aunts, at a place called Mount-sorrel; but though he was better fed than when at home, his circumstances were, upon the whole, less comfortable, for he was unkindly treated by them. After a stay of about fifteen months, his mother fetched him home. He was then sent to school, but the poor child seemed to be marked for ill-treatment. The master was a brutal tyrant, who often held him by the hair and beat his head violently against the wall. "But," says Hutton, "he never could beat any learning into it. I hated all books but those of pictures."

When in his seventh year, William was taken from school, that he might do something towards earning his own living. With this view he was apprenticed for seven years to the silk-mill at Derby. As he was at that time too short to reach the engine, the superintendant of the mills raised him to the necessary height, by tying a pair of high pattens to his feet. These he wore for twelve months, when having grown taller he gladly threw them off. In his tenth year, the poor boy experienced a heavy calamity in the loss of his mother. Returning home one day from his work, he was abruptly told she was dead, and when he burst into tears, the nurse who had attended her comforted him by saying, "Don't cry, child, you will go yourself soon."

The death of Mrs. Hutton was the means of completely breaking up the family. The father

gave up housekeeping, sold off the wreck of his furniture, and took lodgings for himself and three of the children, with a widow who had four children of her own ; his other children were scattered amongst strangers. The following is William's own description of his condition at this period :—

“ My mother gone, my father at the ale-house, and I among strangers,” he says “ my life was forlorn. I was almost without a home, nearly without clothes, and experienced a scanty cupboard. At one time I fasted from breakfast one day till noon the next ; and even then dined only upon flour and water, boiled into a hasty pudding. But the poor child Anne, (one of his sisters) fared much worse. Unable to use her feet, she lay neglected on the floor, or fixed in a chair during the day till I returned from the silk-mill in the evening, when she rejoiced to see me ; for the little remaining time was devoted to her amusement. But alas ! it was of little avail, for in five months she died through neglect.”

We turn from this sad scene, to one even more distressing, the picture Hutton draws of Derby mills, which he quitted at Christmas, 1737. “ It was a place,” he says, “ for which I had a sovereign contempt ; which many hundreds had quitted during my stay, but not one with regret ; a place most curious and pleasing to the eye, but which gave me a seven years' heart-ache. No friendships are formed there, but such as the parties are willing to break. The attendants are children of nature corrupted

by art ; what they learn *in* the mill they ought to unlearn *out*." Again he says, "I had to rise at five every morning during seven years ; submit to the cane whenever convenient to the master ; be the constant companion of the most rude and vulgar of the human race, never taught by nature, nor even wishing to be taught. A lad, let his mind be in what state it would, must be as impudent as they, or be hunted down. I could not consider this place in any other light than that of a complete bear-garden."

Shortly after leaving the mills, being then fourteen years of age, he was bound apprentice to his uncle, Mr. George Hutton, a stocking-weaver, of Nottingham. William's elder brother Thomas, who had been his companion at the silk-mill, was also apprenticed to the same person, but neither of the lads liked the business ; they merely consented to follow it from necessity, because they could find no other into which they could be admitted so easily.

William's uncle was not a bad master on the whole ; but, on some occasions, he gave way to violence of temper, and treated the lads very severely. His aunt was a niggardly, ill-tempered woman who, he said, "grudged him every mouthful he ate." His fellow-apprentices, with the exception of his brother, were bad-principled youths. His situation was, therefore, not a happy one. By the conditions of the engagement he was obliged to work over hours to provide himself with clothes, and as his daily task was a hard one,

he felt this to be a great burden. To be able to dress well was at that time the height of his ambition, but two years elapsed before he could earn sufficient to purchase a genteel suit of clothes.

In the fourth year of Hutton's apprenticeship an event occurred which led to very disastrous consequences. The week of the races at Nottingham is a general scene of idleness among the stocking-weavers of the town, and William, this year, allowed temptation to get the better of him. He absented himself for five days; and when, on the sixth, he made his appearance, his uncle, as might be expected, was very angry. He did not, however, chastise him at that time, but threatened him with a severe thrashing if he did not complete his usual task by the evening. When night came the task was not done. Few persons, after having indulged in idleness for a time, feel inclined to resume their customary labours; and such was the case with this youth.

"Idleness," he says, in his own account of the affair, "which had hovered over me for five days, did not choose to leave me the sixth. Night came; I wanted one hour's work: I hoped my former conduct would atone for the present, but my uncle had passed his word, and did not wish to break it. 'You have not done the task I ordered.' I was silent. 'Was it in your power to have done it?' Still silent. He repeated again, 'Could you have done it?' As I ever detested lying, I could not think of covering myself even from a rising storm, by

so mean a subterfuge, I therefore answered, in a low meek voice, 'I could.' This fatal word, innocent in itself, and founded upon truth, proved my destruction. 'Then,' says he, 'I'll make you.' He immediately brought a birch broom handle, and holding it by the small end, repeated the blows till I thought he would have broken me to pieces."

Severe as this bodily chastisement was, William, who was now a youth between seventeen and eighteen, was far more hurt in mind. The windows being open, the noise reached the ears of some of the neighbours, who came to inquire the cause. On investigation, it was said to be "only Hutton thrashing one of his lads!" but a taunting remark from an acquaintance, the next day following the humiliation he had undergone, the youth made up his mind to abscond.

The idea of running away had, on former occasions, been suggested to him by one of his unprincipled fellow-apprentices. This lad, whose name was Roper, had often urged that they should abscond together; but though William now resolved on leaving his uncle, he had no desire to have Roper as a companion; he, therefore, said not a word to him concerning his intention. On the Sunday evening he concealed himself till the family were all gone out; he then took two shillings from a glass in which were ten, and packed up his little stock of moveables. As his uncle had locked the door and taken away the key, he was obliged to make his escape by climbing

over a wall, eight feet high. It was the month of July, and broad daylight.

The following is his own description of his appearance on starting:—

“Figure to yourself a lad of seventeen, not elegantly dressed, nearly five feet high, rather Dutch built, with a long narrow bag of brown leather that would hold about a bushel, in which was neatly packed up a new suit of clothes; also a white linen bag which would hold about half as much, containing a sixpenny loaf of coarse bread, a bit of butter wrapped in the leaves of an old copy-book, a new Bible, value three shillings, one shirt, a pair of stockings, a sun dial, my best wig carefully folded and laid at the top, that by lying in the hollow of the bag it might not be crushed. The ends of the two bags being tied together, I slung them over my left shoulder, my best hat not being calculated for a bag, I hung to the button of my coat.”

Thus equipped, with only two shillings in his pocket, he set out, casting many a melancholy look back, as he took what he supposed to be “an everlasting farewell of Nottingham.”

“I carried,” he says, “neither a light heart nor a light load; nay, there was nothing light about me but the sun in the heavens, and the money in my pocket. I considered myself an outcast, an exuberance in the creation, a being now fitted to no purpose.”

At ten o'clock at night the fugitive reached his native town. He bent his way thither with the view of catching sight of his father's

house unnoticed, not with the intention of returning home, for that he was afraid to do. The door of the house was open, and he plainly heard his father's step not three yards distant; on this he hurried from the spot.

"How ill calculated are we to judge of events," he says. "I was running from the only hand that could have saved me."

The youth slept that night in an adjoining field, on the cold damp grass, surrounded by cattle. He rose at four in the morning, hungry, sore, and stiff; then placing his bags under a tree, and carefully covering them over with leaves, that they might not be observed, he set out to meet his youngest brother Samuel, who would, he knew, go to the silk-mill before five. He waited upon a bridge till the boy came up, when he told him that he and his uncle had had a little disagreement, and that he had left him and meant to go to Ireland. He begged him to remember him to his father, whom he said he should most likely never see again. When relating this meeting William says, "I had all the discourse to myself, for my brother did not utter one word." It is most probable that the poor boy was too much amazed and affected to speak.

Hutton walked on to Burton the same morning, though it was a distance of twenty-eight miles; and during this long walk he did not spend a single penny of his money. "I was an economist," he says, "from my cradle, and the character never forsook me."

As he always had a desire to examine fresh

places, he left his bags at a public house, for which accommodation he paid one penny out of his two shillings, and took a view of the town ; he travelled on to the environs of Lichfield that evening, and approached a barn, intending to lodge there for the night. Finding the door shut, however, he altered his mind, and resolved, weary and foot-sore though he was, to see the place before he slept ; with this view he changed his clothes, hid his bags under a hedge, and sallied forth. After spending two hours viewing the city of Lichfield, he returned to the spot he had left, put his best clothes carefully back again into his bags, and then left them to look for a place to sleep in. His search for an open barn was not successful ; but that disappointment was trifling compared with the disaster which occurred in his absence. On his return to the spot where he had left the bags, containing his all of worldly wealth excepting the trifling sum of money, he discovered they were gone. Referring to this distressing period of his history, with a mixture of humour and pathos he says, " Terror seized me ; I clamoured after the rascal, but might as well have been silent, for thieves seldom come at a call ; running, raving, and lamenting about the fields and roads, employed some time ; I was too much immersed in distress to find relief in tears, they refused to flow. I described the bags, and told the affair to all I met ; I found pity, or seeming pity from all, but redress from none ; I saw my hearers dwindle away with the twilight, and at eleven o'clock found

myself in the open street, left to tell my mournful tale to the silent night."

Poor William, after all the disasters of that eventful day, lay in the open street, upon a butcher's block.

Rising with the dawn from his hard bed, the fugitive made fresh inquiries about his lost property, but to no purpose. One person, to whom he told his sad tale, recommended him to go to Walsall, with some market-people who were then passing, saying that as it was market-day there, he might possibly get some work; with this vague hope he set out and followed the people to the place. On reaching the village, he applied for employment to a man who was selling stockings in the market, but he was told, in reply, that there were no stocking-frames at Walsall. He was further informed, however, that there were stocking-makers at Birmingham, if he felt disposed to try to get work there; for Birmingham, therefore, he immediately set out.

On reaching the neighbourhood, Hutton was much struck with the appearance of this place, but on entering the town he was even more struck with the people. "They possessed," he says, "a vivacity I had never before beheld; I had been amongst dreamers, but now I saw men awake. Their very step along the street showed alacrity; every man seemed to know what he was about."

There were, at that time, only three stocking-makers in Birmingham, and to each William applied in turn. The first roughly bade him

go about his business, saying that he would have nothing to do with a runaway apprentice. The second gave him a penny to get rid of him; and the third—a Mr. Grace, whom we shall have occasion to mention again hereafter, after questioning him closely about his family, suffered him to go without rendering him any aid.

It must here be remarked, that the youth's habitual regard for truth was not proof against the temptation to try to screen himself from blame. It appears that he repeatedly protested that he had not run away, though his assertions were not generally believed. But we are not surprised to hear this, for one wrong act is sure to lead to others.

Wearied, hungry, and depressed in spirit, he had sat down to rest himself on the side of the Old Cross, when two working men coming up, and seeing him look dejected and lonely, kindly addressed him. "You seem by your melancholy situation and dusty shoes, a forlorn traveller, without money and without friends," said one. The youth replied, that was exactly his case: upon which the man added—"If you please to accept of a pint of ale, it is at your service; I know what it is to be a distressed traveller myself." Hutton assured him that he should receive any favour with thankfulness; upon which they all three repaired to a public-house in an adjoining street, and the wanderer had as much bread, and cheese, and beer as he chose. The men then procured him a lodging in the neighbourhood, where he

slept for three halfpence. Hutton's spirits revived a little by this kindness, and he spent the next day in strolling about Birmingham, for the purpose of getting a more perfect view of it. On the next day he proceeded to Coventry, but he met with no better success there. His applications for work were in most instances answered by—"You are a runaway apprentice; I'll have nothing to do with you;" or something to that effect. From Coventry he proceeded to Hinckley; here he applied to a stocking-maker of the name of Millward, who knew his family at Derby. This man made the same remark that the others had done concerning his being a runaway; however, he set him to work for two hours, and paid him twopence for his labour. Millward then asked the youth into his house, and entered into further conversation with him. He begged that he would tell him ingenuously whether his suspicions were correct; upon which Hutton, with tears in his eyes, confessed that they were, and proceeded to give a statement of the whole truth. Touched by his distress, and deeply interested in his fate, Millward strongly urged him to return to his uncle. Hutton replied that he would return; that he had no objection to serve his uncle, but that he could not submit to being punished. If that were attempted again, he said, he should immediately leave him. On the youth's promising to return, Millward offered him a bed for the night.

On telling him that he had enough money to carry him home, (for he had eightpence left,)

his new friend began to think that he had been guilty of theft ; he could not believe it possible that he had subsisted so many days, and travelled so far, upon so small a sum. " Moralists say," replied Hutton, " keep desire low, and Nature is satisfied with little. A turnip-field has supplied the place of a cook's shop, a spring that of a public-house ; and while at Birmingham I knew, by repeated experience, that cherries were a halfpenny a pound."

Late in the evening of the following day, William reached his father's house at Derby. The elder Hutton was in one of his happier moods, and he received his son with great kindness, and even with tears, only giving him a very gentle reproof. A messenger was sent off early the next morning, to fetch his uncle, and on his arrival a reconciliation took place. In their joy at recovering him, the father and uncle promised to make up the loss he had sustained, but they did not fulfil their promise, and it was some years before William was able to make so good an appearance as he had done previously to absconding. Though the youth was thus restored to the favour of his relatives, he could not feel so happy as formerly. He had lost his time, and his property, and his self-respect ; and he was looked upon as a runaway by his acquaintances, which was a continual annoyance to him.

Nothing remarkable occurred during the remainder of William's apprenticeship, excepting that he formed a friendship with an old gentleman, named Webb, who came to lodge

with his uncle. The conversation and advice of this person, seem to have had a beneficial effect on the youth's character ; but the intercourse was of short duration, for he died in a few months. Hutton now began to show a taste for books and music. To music he devoted himself so enthusiastically, that in the course of a short time he could play on several instruments.

When the term of his apprenticeship expired, young Hutton worked as a journeyman with his uncle, till Mr. George Hutton's death, which took place only the year after. William and his elder brother Thomas, then went to live with their sister Catherine, who was residing in Nottingham. The sister worked hard at the spinning wheel, whilst the two brothers followed their trade as stocking-makers, but trade was very dull and they could not find enough to employ their frames. At one time, William took a journey on foot to Leicester, to sell half-a-dozen pairs of hose ; but the stocking trade was then at such a low ebb, that no one in the town would offer him anything like the prime cost, neither could he get any one to employ him. "As I stood," he says, "like a culprit, before a gentleman of the name of Bennet, I was so affected that I burst into tears, to think that I should have served seven years to a trade, at which I could not get bread."

Many young men would have sunk under such discouragements and disappointments ; but Hutton's was not a mind to be baffled by

difficulties, or wholly cast down by grief. He resolved on trying an entirely new business, which was to bind and sell books. He was led to think of following this trade, through having occasionally patched and bound some old volumes and pamphlets, which formed his humble library, for he had for some time past, employed his leisure in reading and making verses. He was encouraged and assisted to make an attempt at his new trade by his sister, who appears to have been a sensible, as well as a worthy and kind-hearted woman. He began by procuring books, in worn-out binding. These he pasted, patched, and varnished, for sale. He then fixed up a few shelves, and arranged the books in the best manner he could. He did not at first wholly depend on his new trade, but continued to work at the stocking frame at intervals, and between the two businesses, he managed to support himself with frugality.

He gives the following account of the manner in which he gained the principal part of his knowledge of his new business :—

“ If I purchased shabby books,” he says, “ it is no wonder that I dealt with a shabby bookseller, who kept his whole working apparatus in his shop. It is no wonder, too, if by repeated visits I became acquainted with this bookseller, and often saw him at work ; but it is a wonder, and a fact, that I never saw him perform one act but I could perform it myself, so strong was my desire to attain the art. I made no secret of my progress, and the book-

seller rather encouraged me, and that for two reasons: I bought such rubbish as nobody else would, and he had often an opportunity of selling me a cast-off tool for a shilling, not worth a penny. * * *

"The bookseller at length offered me a worn-down press for two shillings, which no man could use, and which was laid by for the fire. I considered the manner of its construction, bought it, and paid down the two shillings. I then asked him to favour me with a hammer and a pin which he brought with half a conquering smile and half a sneer. I drove out the garter-pin, which being galled, prevented the press from working, and turned another square, which perfectly cured the press. He said, in anger, 'If I had known, you should not have had it.' However, he consoled himself by the idea that all must return to him in the end. This proved," Hutton adds, "for forty-two years my best binding-press."

After awhile, Hutton resolved on giving up the stocking-trade altogether, and devoting his whole attention to book-binding and book-selling. In this resolution he was aided and encouraged by his good sister, who raised the sum of three guineas, to enable him to go up to London, and purchase materials and tools.—This money she carefully sewed in the collar of his shirt, in case he should meet with robbers, by the way, which at that period was not uncommon. She gave him, moreover, eleven shillings in his pocket. This sum was not only for the expenses of his journey, but to offer to

any highwayman he should chance to be attacked by. Happily, however, no such adventure occurred.

During his stay in London he met with one loss by theft. This was of a pocket-handkerchief, which was snatched from his pocket in St. James's, upon which circumstance he drily remarks, in his diary—"The people of St James's are apt to fill their pockets at the expense of others."

When in London, Hutton gratified his love of seeing novelties, but not those which cost money. One penny to see Bedlam was all he could spare. Though he had walked one hundred and twenty-five miles to London, he was on his feet the whole of the three days he remained there. "If," he says, "a man goes to receive money, it may take him a long time to transact his business; if to pay money, it will take him less; and if he has but a little to pay, still less. My errand fell under the third class." His business was therefore soon over, and he had the rest of the time for recreation.

His journey back to Nottingham was, however, disastrous; for his shoes were worn out, his feet blistered, and he fell lame, owing to the sinews in one of his legs being overstrained by walking so far.

The whole expenses of his journey, up and down, which took nine days, came within his eleven shillings, for he brought fourpence of it back.

Having procured these fresh materials for

his business, the next thing to be determined on was, where he should commence operations. After some deliberation, he resolved on opening a shop on the market days, at a small place called Southwell, as a sort of preparation for afterwards opening one in Birmingham. As he was at present an unpractised workman, he judged this to be the wisest and safest plan.— The rent of the shop he fixed on was but twenty shillings a year. He put up a few shelves, and then sent over about two hundred weight of “trash,” which, he says “might be dignified by the name of books.” Still he became, to use his own words, “the most eminent bookseller in the place.”

The following is his account of his weekly visit to this shop.—

“I set out at five o’clock every Saturday morning, (it was the Michaelmas quarter when he commenced,) carried a burden of from twenty to thirty pounds weight ; opened shop at ten ; starved in it all day upon bread and cheese, and half a pint of ale, took from one to six shillings, shut up at four ; and by trudging through the solitary night, and the deep roads, five hours more, I arrived at Nottingham by nine ; where I always found a mess of milk porridge by the fire, prepared by my valuable sister. Nothing short of surprising resolution and rigid economy could,” he adds, “have carried me through this scene.”

After keeping this shop about twelve months, Hutton determined on opening a shop at Birmingham. He had taken a fancy to that

place from the time he had visited it, when a fugitive. Here too, he was obliged to content himself with beginning in a very humble way. He rented the lesser half of a shop, for which he paid the low rent of one shilling per week, and he lodged with the people who kept the other half.

Hutton's stock in trade was, however, considerably increased at this time, in a singular manner. A dissenting minister of Gainsborough, named Rudsall, with whom his sister Catharine had once lived as servant, told her that as he was about to give up housekeeping, he would sell the refuse of his library to her brother.

Catharine replied that her brother could not purchase the books, as he had not sufficient money. "We will not differ about that," said Rudsall; let him come to Gainsborough, and he shall have the books on his own terms."

Hutton walked over, as requested, and found about two hundred weight of books, better-looking and more valuable than any he possessed in his shop. Mr. Rudsall gave him a corn-chest to put them in, and then proceeded to draw up a note of hand for the value, which ran thus:—

"I promise to pay Ambrose Rudsall one pound seven shillings when I am able." On putting it into the hands of the young man, the benevolent minister said, "You need never pay this note, if you only say that you are not able." The money was, however, duly returned.

Though Hutton was more successful in his

business than formerly, he was not on the whole so happy. He missed his affectionate sister, whom he left at Nottingham, and he was thrown entirely upon strangers. "I had entered a new world," he says, "in which I led a melancholy life—a life of silence and tears. Though a young man, and rather of a cheerful turn, it was remarked that I was never seen to smile. The rude family into which I was cast added to my load of melancholy." But under these sad circumstances he was supported by moral and religious principles, and by forming new and still more ardent resolutions. His mind appears to have been a rare union of great sensibility and unconquerable energy. He was, at this time, much persecuted by the overseers of the poor, who threatened and harassed him for two years, in order to force his removal from the parish, which, as the poor laws then stood, they might have effected. Their plea for this petty tyranny was, that it was probable he would become burdensome to them; but such was not very likely to be the case with a man of Hutton's independence, industry, and perseverance.

In the course of twelve-months, Hutton formed a few acquaintances, and amongst these was Mr. Grace, the stocking-maker, who had questioned him so closely, without affording him any aid, when he was in circumstances of such need. He was now desirous of Hutton's becoming his neighbour, and there being a shop to let, next door to his own, he pressed the young man to take it. Hutton's position was

now much improved, still, with his customary prudence, he was fearful of engaging the shop, because the rent was eight pounds per annum. He was won, however, to consent; and the speculation turned out well; for his customers were more numerous, and of a better class. Hutton, at first, dined with Mr. Grace every day, at a settled price, and kept no servant; but finding this plan inconvenient, he hired a person as a sort of housekeeper. He was unhappy in his choice of a domestic; she sold his books, in his absence, for what they would fetch, and then spent the money in drink. He dismissed her and hired another; but being equally unfortunate this time, he resolved on having no more housekeepers, but on finding a wife. Perhaps, the young man came to this resolution more readily from having seen a person exactly to his mind. Mr. Grace, being a widower, had sent for one of his nieces to come and keep his house. This young lady was both pretty and amiable, and as Hutton was so often a visitor at her uncle's, it is not surprising that an attachment should spring up between them. It appears, however, that they were not taken with each other at the onset of the acquaintance, but, says our historian, "by the time Christmas had arrived, our hearts had united, without effort on either side. Time had given numberless opportunities of observing each other's actions, and trying the tenor of conduct by the touchstone of prudence."

The uncle was, at first, much opposed to the attachment; for he was selfish enough to wish

to prevent the young lady marrying, because she was so useful to himself as a housekeeper ; but he was at last won to consent.

The parents of the lady lived in the neighbourhood of Derby, and Hutton went thither to make his offer in due form. He candidly stated his present circumstances and future prospects, (he had by this time saved two hundred pounds), and he then asked what fortune they proposed giving their daughter. A hundred pounds were offered, which he thought rather "under the mark." "You cannot desire more than we can give," mildly expostulated the mother. Hutton deemed this reply unanswerable ; but when he visited his sister Catherine, whom he had not seen for four years, and related to her what had passed, she, with her customary good sense, remarked, "A fortune is a trifle ; what is the woman ?" "To my wish," was the brother's answer. "Then," she added, "she has a fortune with her."

There is, we must allow, something repulsive in this transaction, for it had the appearance of bargain-making ; but to Hutton's credit it must be told, that his marriage was not contingent on the money. He had resolved on having the young lady, even should her parents say they could not give her a shilling. His affection for her was founded on the highest esteem, and forty-years of wedded happiness proved his choice to have been a wise one.

From the time of Hutton's marriage, his business rapidly increased. He added a paper

warehouse to his bookselling business, and the tide of prosperity continued to flow on for a long series of years. He had a few losses, it is true, and one rather heavy through a desire to have a paper-mill of his own, but these losses did not materially throw him back; indeed, they only stimulated him to make greater efforts, in order to repair them. The principles on which he acted were these—and they were principles which all young men engaged in business would do well to adopt; “I never,” he says, “could bear the thought of living to the extent of my income—never omitted to take stock, or to regulate my annual expenses, so as to meet casualties and misfortunes.”

Yet Hutton was not niggardly, he never denied himself, or his family, any comfort or amusement which they could enjoy without injury to their future welfare, and he was a kind friend to the poor.

From boyhood, Hutton appears to have had an ambition to be a landholder; no sooner, therefore, was he possessed of sufficient means, than he purchased land. Some of his speculations were rather hazardous, but most of them turned out well, and in time, he became an extensive land proprietor. He erected a house on a portion of land which he had bought at Bennett's Hill, a place about two miles from Birmingham; where he afterwards resided the greater part of every year.

In 1782, Hutton published his first Prose work, a “History of Birmingham,” which gained him the honour of being elected a

member of the Scottish Antiquarian Society. Encouraged by this success, he continued his literary career, and produced several valuable works, mostly histories. Previously he had amused himself by writing verses, which had been inserted in magazines; but his verse making was never much esteemed excepting for its expression of good feeling.

When Hutton became a rich man, parochial and civic offices and honours were offered him. He was first chosen one of the overseers of the poor—an office which he filled to the satisfaction of the humbler classes, a fact of rare occurrence. In 1772 he had been made one of the commissioners of the Court of Requests. Referring to his early state of destitution, and subsequent importance in the town of Birmingham, he says. "I sat down to rest upon the Old Cross, (1741) the poorest of all the poor belonging to that great parish, of which, twenty-seven years after, I became overseer. I sat under that roof a silent, oppressed object, where, thirty-one years after, I sat to determine differences between man and man."

His office as Commissioner of the Court of Requests, appears, however, to have been one of the leading causes of those disasters, which reduced him, in one day, from opulence to the extreme of poverty. Most of our readers are, no doubt, acquainted with the leading facts, relating to the celebrated Birmingham riots of 1791, in which Dr. Priestly, and many others suffered such heavy losses. Mr. William Hutton. though a peace-loving man, and a

benefactor to the town, was one of the unfortunate individuals against whom the lawless mob directed their fury. The ostensible cause for these disorderly proceedings, was zeal for the Church and King. Most of the persecuted individuals were dissenters, "but" says Hutton (who wrote a History of the Riots three weeks after they took place, though it was not published till it appeared in his life) "these people would have sold their King for a jug of ale, and demolished the Church for a bottle of gin."

The riots began on the evening of July 14th, by a number of idle men and lads attacking an hotel, where a public dinner had been held, by some gentlemen who were supposed to be inimical to the Government. Mr. Hutton was not one of the number—indeed he knew nothing of what was going on in the town till the next day, he and his family being at his house at Bennett's Hill. "When I arose the next morning," he says, "my servant told me what had happened. I was inclined to believe it only a report, but coming to the town I found it a melancholy truth." No precautions having been taken by the magistrates to quell the mob, they recommenced the work of destruction. About noon a person came to Hutton with tears in his eyes, telling him that his house was condemned to fall. He could not credit the information. "Being no man's enemy," he writes, "I could not believe I had an enemy myself. I thought the people, who had known me forty years, esteemed me too much to injure me; but I drew from fair pre-

mises false conclusions. My fellow-sufferers," he adds, "had been guilty of *one* fault, but I of *two*. I was not only a dissenter, but an active Commissioner of the Court of Requests. In the office of commissioner I studied the good of others, not my own. Three points I ever kept in view: to keep order, do justice tempered with lenity, and compose differences. Armed with power, I have put a period to thousands of quarrels; have softened the rugged tempers of devouring antagonists; and, without expense to themselves, sent them away friends. But the fatal rock upon which I split was—I never could find a way to let both parties win."

Four times, by means of liquor and money, the mob were induced to refrain from setting fire to Hutton's house; but after all it was attacked, and reduced to a mere skeleton, whilst his extensive stock, and furniture, were thrown out at the window into the street. Next day the rioters went to Bennett's Hill. Here they made three immense bonfires of the furniture, and set a light to the house. As his life was in danger, he and his family quitted the place without a shilling, and proceeded to Sutton Coldfield, where they took a lodging; but persons were afraid to assist him, lest they and their property should suffer for it, and in the evening of the same day, his landlady begged him to depart. The family accordingly proceeded to Tamworth, where they slept, and then removed to Castle Bromwich. From this retreat, however, they were forced; for some of

the rioters came there that night from Birmingham, and the terrified villagers entreated him to remove to Stonnel. Writing of this period of his life, he says—"I was avoided as a pestilence. My children were distressed, my wife, through long affliction, was ready to quit my arms for those of death. What a reverse of situation! How thin the barrier between affluence and poverty! On the morning of the 15th of July, 1791, I was a rich man; in the evening I was ruined. At ten at night on the 17th, I might have been found leaning upon a mile-stone, upon Sutton Coldfield road, without food, without a home, and without money."

In this exigence, however, a merciful Providence opened a door of hope. A man accosted him, asking if his name were Hutton. On his replying in the affirmative, he informed him, that he had seen troops from London on their way to the scene of riot. This was indeed welcome intelligence, for he had reason to expect that the arrival of the military would put an end to the disturbance. So it proved, and Hutton returned to Birmingham. A little of his property had been saved by his friends, but he was without a home: however, no less than seventeen persons came forward to offer him their houses—sixteen of these individuals were members of the Established Church; which is a proof that Hutton was not a party man, or inimical to the Church and State, of which he was so violently accused.

Whilst the rioters were searching over his cabinet, for papers against the Government, a

ludicrous circumstance occurred. They fell in with a paper containing a loose tooth, on which was the following inscription—"This tooth was destroyed by a tough crust, July 12th, 1775, after a faithful service of more than fifty years. I have only thirty-one left." In the London papers it was afterwards proclaimed, that the antiquarians had sustained an irreparable injury; for one of the sufferers in the late riots had lost a tooth of Richard the Third, found in Bosworth Field, and valued at £300.

An act of parliament granted some recompense to Mr. Hutton for the damages he had sustained; but nothing like the sum he had lost. This justice was so tardy, and he had so much trouble and anxiety in the affair, that he was induced to wish that he had given up his claim, and lost all.

The ungrateful return Hutton met with, for the gratuitous services he had rendered his fellow-townsmen, so affected him, that he determined on retiring wholly from public life, and spending the remainder of his days with his family; engaged with his books, and his pen.

He had, at this time, a very serious trial to endure, in the continued illness of his beloved wife, who was a great sufferer from asthma. In the year 1796 she died.

But though he settled his business on his son, he offered to assist him gratuitously, and walked into town every day for that purpose. The following is his own account of the manner in which he spent his time, at this period of his

life :—" My practise," he says, " had long been to rise about five, and relieve the nurse of the night, by holding the head of my dear love in my hand, with the elbow resting on my knee, for she was unable to lie down. At eight I walked to business, at Birmingham, where I stayed until four, when I returned. I nursed her till eight, amused myself with literary pursuits till ten, and then went to rest." Hutton's devoted affection for his wife was a very prominent and beautiful trait in his character ; and hers for him appears to have been of the same enduring nature. " I told her, he says, " forty-one years after our marriage, that she had never approached me without diffusing a ray of pleasure over my mind, excepting when any little disagreement had happened between us : she replied, ' I can say more than that, you never appeared in my sight, even *in* anger, without the sight giving me pleasure.' I received the dear remark," he adds, " as I now write it, with tears."

Hutton's last years were peaceful and serene, and they were mostly spent at his house at Bennett's Hill, though he continued his daily walk into Birmingham. About this time, he undertook several journies ; and one of these journeys, which was performed in his seventy-eighth year, is especially worthy of notice.— He had long felt a great desire to examine the famous Roman wall, which crosses the island from the German ocean to the Irish sea ; and, aged as he was, he resolved on seeing it, and accomplishing the journey on foot. His daughter, who was

then his housekeeper, was much opposed to the plan, being justly apprehensive that the fatigue would prove greater than his strength was equal to; but he could not be moved from his purpose. She was the companion of his journey, and she gives the following account of the manner in which they travelled:—"I rode on a pillion behind the servant; and our mode of travelling was this:—My father informed himself at night, how he could get out of the house the next morning, before the servants were stirring. He rose at four o'clock, walked to the end of the next stage, breakfasted, and waited for me. I set out at seven, and when I arrived at the same inn, I breakfasted also. When my father had rested two hours, he set off again; when my horse had fed properly, I followed, passed my father on the road, arrived before him at the next inn, and bespoke dinner and beds. My father was so careful not to be put out of his regular pace, that he would not allow me to walk by his side, either on foot or on horseback, not even through a town. The only time I did walk with him was through the streets of Warrington. He chose that pace which was the least exertion to him, and never varied it. . . . My father delivered all his money to me before we left home, reserving only a few pieces of loose coin, in case he should want on the road. I paid all bills, and he had nothing to do but walk out of an inn, when he found himself sufficiently refreshed. . . . He usually came into an inn in high spirits. . . . On our return," continues the lady, "walking through Ashton,

a village in Lancashire, a dog flew at my father, and bit his leg, making a wound about the size of a sixpence. I found him sitting in the inn at Newton, where we had appointed to breakfast, deploring the accident, and dreading its consequences. They were to be dreaded; the leg had yet a hundred miles to walk, in extremely hot weather. I comforted my father:—"Now, said I, you will reap the fruit of your temperance; you have put no strong liquors or high sauces into your leg; you eat but when you are hungry, and drink but when you are thirsty, and this will enable your leg to carry you home." The event showed I was right. He walked," she adds, "the whole six hundred miles in one pair of shoes."

The result of this singular excursion, was the publication of a work, called "The Roman Wall." He also published "Remarks on North Wales," the same year (1801).

The last entry made by Hutton, in his "Memoirs," bears the date of 1812:—"This day, October 11th, is my birth-day, I enter on my ninetieth year, and have walked ten miles."

Summing up his character his daughter writes:—"My father was an uncommon instance of resolution and perseverance, and an example of what these can perform. . . . I think the predominant feature in his character was the love of peace. No quarrel ever happened, within the sphere of his influence, in which he did not act the part of a mediator, and endeavour to conciliate both sides; and, I believe, no quarrel ever happened where he was concerned,

in which he did not relinquish a part of his right. The first lessons he taught his children were, that the giving up an argument was meritorious, and that having the last word was a fault."

William Hutton died at the advanced age of ninety-two; "and," writes his daughter, "such was the happy disposition of his mind, and such the firm texture of his body, that ninety-two years had scarcely the power to alter his features, or make a wrinkle in his face."

THOMAS SCOTT,

COMMENTATOR ON THE BIBLE.

THOMAS SCOTT was born on the 16th of February, 1747. His father, who was a grazier, owned the small farm of Braytoft, near Spilsby, in Lincolnshire; and at that place, Thomas, his tenth child, was born.

John Scott had raised himself to independence, by his own prudence and industry; and his wife, who was a woman of superior mind, was descended from a highly respectable, and somewhat ancient family at Boston.

Thomas received the elements of his education from his mother, and she appears to have been well qualified for the task of instructing him, for her son so highly esteemed her prudent management and useful maxims, that, in after years, he made them the model for regulating his own family.

Having an elder brother and sister settled at Bennington, a village near Boston, Thomas

was sent thither, when eight years old, that he might have the advantage of attending a school, kept by a clergyman in that parish. He remained there two years, and it is most probable that this brief period of instruction would have completed his education, had not a circumstance occurred in the family which gave a turn to his future prospects.

Mr. John Scott had brought up his eldest son to the profession of medicine, and he had obtained the appointment of surgeon's mate on board a man-of-war. He was a young man of promising abilities, and his father had looked forward with pride to his one day rising to eminence, but, to his grief and disappointment, this son was carried off by small-pox, at the age of twenty-four: he had caught the disease by going, at his own desire, on board an infected vessel, with the laudable motive of increasing his professional knowledge and usefulness.

Mr. Scott had a desire that one of his sons should follow the medical profession, and his choice now fell on Thomas, as the most suitable. With this view, the lad was sent to an academy of high repute, in Yorkshire, where his deceased brother had been educated; he remained there five years, during which time he made considerable progress. He was quick at acquiring languages, and could translate well; but singularly enough, though he afterwards wrote so much, he had, when a boy, no talent for original composition. He could not conceive, he says, how thick volumes could be produced from thoughts alone, and the art of verse-making

was an equal mystery to him. Scott's mind was constituted rather for deep investigation into profound truths, than to take flights of fancy, and in after life, alluding to this deficiency of imagination, he wisely remarked, "Nature had not made me a poet ; and I am very thankful that I never attempted to make myself one." He would, however, have made more progress in learning, had he not been influenced by the evil example of some of his fellow pupils. Some of these youths, taking advantage of the advanced age and consequent infirmities of their preceptor, carried on immoral practices, and contrived to obtain books highly injurious to the mind. Mr. Scott, from this experience, formed an unfavourable opinion of public seminaries in general, and strongly deprecated them. When himself a parent, he would not allow any of his children to be educated in public schools. "I thought," he says, "the danger to their morals and religious principles, vastly more than compensated for all the advantages to be derived from them." On leaving school, Thomas Scott ardently desired to join some of his companions, who were about to enter one of the universities, but this his father's limited means would not allow of. He was therefore bound as an apprentice, to a surgeon and apothecary, at Alford, a town about eight miles distant from his home.

Here again, unhappily, he was subject to no moral restraint, but open to temptations of every kind. His master possessed considerable

knowledge and skill in his profession, and in those respects was a desirable teacher ; but he was altogether unfitted for the charge of youth, being a professed infidel in his creed, and a profligate in his practice. Thus surrounded by vice, and left without one voice either to warn or counsel, it is no matter of surprise that he fell into indolent habits, and bad company.— That youth is to be pitied who, far removed from a father's watchful eye, and a mother's affectionate admonitions, is thrown by circumstances into contact with evil. Sin must not be in any degree palliated ; nor can circumstances, however unfavourable, justify it in the sight of God. The Word of God says decidedly, " If sinners entice thee, consent thou not." Yet his must be the greater sin, who deliberately chooses the paths of error, and sins against light and privileges, and who leads others from virtue.

Thomas Scott does not appear to have had any vicious propensities, but he wanted the moral courage to act out the dictates of conscience, when exposed to evil example and evil influences.

After a stay of only two months in this situation, he was dismissed from his apprenticeship, and returned to his family in disgrace. All his father's lofty expectations were destroyed by this unexpected blow. His own hopeful prospects were also blighted ; and now, instead of being looked upon with pride, he was regarded as a reproach.

His master refused to give up his indentures

until the whole of the premium (which had been only partially paid) should be made up. His father was indisposed to make an effort to do this. All hope, therefore, of future advancement, seemed cut off; and he was set to do some of the most unpleasant work in his father's farm. Had this employment been opened to him in the path of duty, his mind might have risen superior to the labours of his hands—for a man is not necessarily degraded by change of circumstances; nay, so far from it, had the trial been altogether unavoidable, and had his conscience been free from self-reproaches, his character would probably have been elevated and strengthened by it, and his energetic mind would have looked forward to the future with hope. But he had himself dashed the cup of blessings from his lips, and now he was compelled to drink the bitterest dregs.

His father's anger was kindled by the discredit his conduct had brought upon his family, and he showed no willingness to better his condition. The farmer was even foolish enough to express displeasure, when he found his son devoting his leisure hours to study, thinking that books would unfit him for his present duties. This was an error of judgment, for the youth who has a taste for instructive and healthy reading, cannot be wholly absorbed by low and sensual pursuits. To have encouraged a love of study, therefore, would have kept the young man from many temptations. To a mind like young Scott's, thirsting as it was for knowledge, and panting for literary distinction,

such a denial was painful in the extreme ; his temper was irritated under it, and he sunk into a morbid state of feeling. There were times, however, when, whilst tending his flock, (his employment being principally that of a shepherd,) he indulged the fond idea—for it could scarcely be called the *hope*—of one day being able to resume those beloved pursuits.

Nine years had elapsed since Scott had quitted Alford, and time had in some measure reconciled him to his condition ; when he one day accidentally heard that his father had made a will in favour of his only surviving brother, who was already provided for, and excluding him from any share in his little property.

This partial and unjust conduct aroused the young man's dormant energies, and he determined on making a vigorous effort for independence. Much to the farmer's astonishment, his son immediately collected together his small library, which at that time consisted of an old Greek grammar, a torn dictionary, and two or three tattered fragments of Latin authors ; and these he set about studying with ardour.

He had long had an eye to the Church ; and he now resolved, if possible, to obtain orders : he kept his plan, however, a profound secret, waiting for an opportunity for putting it into execution. But he did not once put to himself the question—"Am I fit for this sacred office?"

The disclosure was made earlier than he had intended, for one evening, on returning home, wet and fatigued, he incurred what he considered to be the causeless displeasure of

his father, This trifling circumstance, when added to the indignant feeling his father's former injustice had awakened, aroused his temper, and throwing off his shepherd's dress, he declared that he would never again wear it. Thus determined, he set out for Boston, the residence of a clergyman with whom he was slightly acquainted.

The churchman received the Lincolnshire shepherd in a warm and kindly manner, but when, after some hesitation, he told him that the object of his visit was to consult him on the preliminary steps for obtaining orders, the worthy pastor was all amazement. His surprise was increased when, on putting a Greek testament into the young man's hand, he read off several verses, and then translated them both into Latin and English. The discovery that young Scott possessed both learning and talent, increased the interest his clerical friend had previously felt for him, and he readily promised to do all he could to assist him. He told him that a visitation was to be held the following week, and that he would then mention his wishes to the archdeacon, Dr. Gordon.

These arrangements made, Thomas Scott, much to his credit, immediately returned home ; as he knew that his services were particularly required on his father's farm just at that season. Scott sometimes gave way to irritability of temper, and thus, for a time, lost sight of the respect ever due to a parent ; but he never forgot the duty he owed to his father. " In my *actions* to my father I never offended," he

This barrier removed, Dr. Calthorpe, the vicar of Boston, who had long known Mrs. Scott's family, came forward as his friend, and wrote to the bishop in his behalf. Thus encouraged, the young man again set out in the path of learning. His principal difficulty was now the want of books ; he had not a friend to whom he could apply for the loan of a few pounds, and he was therefore obliged to depend wholly upon his own resources. This fresh obstacle was, however, overcome in the following singular manner:—Ten years previously a lamb had been given to him, and from that one lamb he had reared a flock of sixty-eight sheep ; these sheep he sold to his father for as many pounds, and that sum served to supply him with books and suitable dress. It also paid the expenses of his ordination, and left him twenty guineas to commence the world with, in his new profession.

Scott's second application met with no opposition ; so far from it, he passed the examination with great credit, and received the compliments of the assembly.

In September, 1772, he was made a deacon ; and in March, in the following year, he received priest's orders. An offer was also made of the curacies of Stoke Goldington, and Weston Underwood, in Buckinghamshire ; which offer he accepted, though the joint incomes amounted to only fifty pounds per annum.

An entirely new sphere of action now opened to the young student ; he who had been a feeder of sheep, was about to become the shepherd of souls. But was he fitted for this

important charge! His persevering struggles for independence were highly to be commended, and the energy with which he pursued his object met the success it deserved. His desire to rise from a manual occupation to literary distinction, is not, in itself, to be condemned. But to enter the ministry, from the above stated motives, was unquestionably wrong, and he, himself, afterwards saw and acknowledged that it was so. "My views in entering the ministry," he says, (in his "Force of Truth,") "so far as I can ascertain them, were these three. First, a desire of a less laborious, and more comfortable way of procuring a livelihood than otherwise I had the prospect of. Secondly, the expectation of more leisure to employ in reading, which I was inordinately fond of. And thirdly, a proud conceit of my own abilities, and a vain-glorious imagination, that I should some time distinguish and advance myself in the literary world. These were my ruling motives in taking this bold step; motives as opposite to those which should have influenced me therein, as pride is to humility; ambition to contentedness in a low estate, and a willingness to be the least of all, and servant of all; as opposite as love of self, of the world, of filthy lucre, and slothful ease is opposite to the love of God and souls, and of the laborious work of the ministry. Mine, therefore, be the shame of this heinous sin, and to God be all the glory of over-ruling all for good, both to unworthy me, and to his

dear people the Church, which he hath purchased with his own blood."

Mr. Scott had ever been distinguished for benevolence, and in his present position he found full scope for its exercise. His numerous flock were mostly both ignorant and idle, and as a necessary consequence, very poor. His new position was not, therefore, one in which he could indulge in learned leisure.

His energies were now bent on forming plans for bettering the physical, as well as moral condition of the people. As there were no schools for the poor in the parish, he collected a group of children around him every Saturday, for the purpose of instructing them. He likewise made visiting the sick a medium for conveying useful information, by lending books, to any who would avail themselves of these means of instruction.

A rich gentleman, one of his parishioners (a Mr. Wrighte) made him his almoner, and he was thus enabled to relieve the bodily necessities of many of his parishioners. He was not, however, so engrossed by the duties of his office, as to wholly give up his studies; for he still hoped to rise to professional distinction. He was informed that even without an university education, a clergyman might obtain the degree of Bachelor of Divinity, by paying a trifling subscription for nine years. Availing himself of this, he had his name enrolled on the list at Clare Hall, Cambridge, for several years; but before the time had expired, he experienced that change of heart which made

him indifferent to worldly distinction—a change, which could alone fit him for the sacred charge he had undertaken, but to which he was, at the period we are speaking of, a stranger.

With perseverance worthy of a better motive than mere self exaltation, Mr. Scott devoted every leisure moment to the study of Greek and Hebrew, avoiding, as much as possible, the interruption of company, and even abridging the necessary hours for rest. By these means his progress was considerable. There is nothing like a thorough determination, to ensure success in any undertaking.

At the house of Mr. Wrighte, Mr. Scott became acquainted with an estimable widow lady, who shortly after became his wife. She had received a good education, and possessed a superior mind; but owing to reverses in her circumstances, she at that time held the situation of housekeeper in Mr. Wrighte's establishment, where she was treated as one of the family. Mr. Scott was then tutor to Mr. Wrighte's only son, and his frequent visits to the house, gave him opportunities of judging of the lady's character. He was so much pleased with the good sense, and good temper she displayed—two very important qualifications in a wife—that he made her an offer of his hand. He had always discountenanced the idea of marrying either for money or for beauty, and he acted up to his principles, for his wife possessed neither advantages. He never had reason to regret his choice.

Mr. Scott's friends were pleased with the good sense he displayed in this important affair, and they now tried to procure him a better appointment.

The hope of some day rising to wealth and distinction, had cheered the solitude of his early years, and it had sustained him under toils and hardships ; but now, when his bright visions seemed about to be realized, a fresh and altogether unlooked-for obstacle presented itself.

Twice he had subscribed to his belief in the articles of the English episcopal church, without sufficiently weighing their import. But happening one Sabbath day, when looking for a psalm which had been given out, to open upon one of the articles to which the opinions he then held were directly opposed, he felt that he dared not do so again, and thus belie his conscience for the sake of interest. He was aware that to make known his determination not to subscribe, would be to give up all hope of preferment ; and not only so, but most probably entail on himself poverty and disgrace ; and with a wife and an increasing family these were serious considerations. He resolved, however, upon acting up to his principles, whatever the result might be.

We cannot do otherwise than admire Scott's honesty and firmness, though they were directed to a wrong object. The opinions for which he was making this sacrifice were unscriptural, and he was led afterwards to see his error, and to strongly condemn it.

When his resolution was made known, it

caused considerable excitement; some of his friends had recourse to threats, others to entreaties, some were offended; and among these was Mr. Wrighte, who not only withdrew his friendship and patronage from Mr. Scott, but gave him to understand that he could dispense with his services as tutor to his son, which greatly reduced his already limited income.

Scott had studied the scriptures diligently, as a Hebrew and Greek scholar; but a merely intellectual knowledge of the Bible, leaves the mind still in ignorance of the true spirit and design of the word of God. He now searched the sacred volume for the purpose of collecting arguments to defend his own opinions, though not altogether from a spirit of controversy. He wished to ascertain whether the article in question really was, or was not in accordance with the word of God. The investigation gradually opened Divine truth more and more clearly to his mind, and he was compelled, by his own convictions, to yield his favourite doctrines, one after another. His mind underwent a long and painful struggle; the pride of human reason contested every step; but he was earnestly desirous of discovering truth, and in this search he implored the aid of the Spirit of Truth, that Spirit whose office it is to teach us all things; under such a Teacher his own wisdom appeared foolishness. It may be interesting and useful to trace the workings of Scott's mind throughout.

In early life he had been taught something of God's requirements from his

tures. When about sixteen years of age, he had begun to think seriously of the consequences of sin, and had made some efforts at reform ; but religion was then a weariness to him, for he saw God only as a righteous Judge, exacting outward homage. He knew nothing of him as a Heavenly Father, and a God of Love, who claims the affections of the heart. He had made resolutions to amend his conduct, but quickly broke them. He had made fresh resolves, but sin was sure to gain the ascendancy, because with the tendency to evil which is natural to the heart of man, he loved sin ; and years had passed on in this manner. Some time after, happening to meet with a book which tended to flatter his pride, and soothe his conscience, he read it with avidity. This book made sin appear less ugly in his own eyes, and a small matter in the sight of God. It moreover represented God, as too merciful to punish, and disposed to look over a few blemishes. It made human nature appear intellectually great, and almost perfect, morally. It professed to explain away all mysteries in religion, and to bring all God's purposes down to a level with man's understanding. It taught that there is no eternal punishment, except for notorious sinners ; but that those who are not quite good enough for heaven, will sink into original nothing.

Scott, from that time, adopted these opinions ; but he did not often broach them, as they were not generally well received. On the occasion of his ordination, he had expressed his belief in general terms, without giving himself

the trouble to consider the import of his words ; being, as he himself afterwards acknowledged, intent on self and ambition. His early sermons were all on moral duties ; and he thought that by preaching such sermons, he was discharging his duty towards his parishioners. But after the Scriptural investigation referred to above, he writes :—

“ As to my own affairs, I have had too ambitious and interested views. I have more anxiously consulted by what means I might advance myself, than how I might make myself useful as a minister of the Gospel. But it has pleased Providence, that by means of those very studies on which I founded my hopes of advancement, but which have been carried on in a direction very different from what I intended, I have arrived at a disposition of heart, and a train of thinking, which are totally incompatible with all my hopes of preferment. In one word, I have discovered the importance of that trust which is committed to me ; what is the extent of the duty it requires ; and how it ought to be performed.”

In the spring of 1777 Mr. Scott removed to Weston Underwood, where he occupied a house, called “ The Lodge,” afterwards celebrated from being the residence of the poet, Cowper. Three years subsequently, he succeeded the well known, and highly esteemed Mr. John Newton, in the curacy of Olney, and about that time he published his first work, “ The Force of Truth.”* The poet Cowper

* We highly recommend this work to the perusal of young men especially.

revised this book in point of style, but made no alterations in the opinions.

The parsonage house, at Olney, was adjoining that occupied by Cowper and Mrs. Unwin. Mr. Newton had had a door opened in the garden wall, for more ready communication between the families, and the friendly intercourse was kept up by Mr. Scott. Whilst Mr. Scott was residing at Olney, part of the parsonage house was rented by the widow of Sir Robert Austen ; the lady who is so well known as having instigated the poet to write "The Task," "John Gilpin," &c., and it was in his house that the last mentioned humorous tale was first told.

Mr. Scott was even more straitened in circumstances in his new curacy than formerly ; the living was only £30 per annum, with a few surplus fees ; some voluntary contributions which had been made to Mr. Newton, were withheld from his worthy successor ; but Lady Austen, unknown to him, set on foot a yearly subscription, for his benefit raised, amongst the inhabitants of the place. Though the sum was small, it was of great service to him, and as his flock were mostly very poor people, it shewed the esteem in which they held him.

In 1785, Mr. Scott was invited to the chaplaincy of the Lock Hospital, in London. Thinking that this office would place him in a wider field for usefulness than the one he then occupied, he accepted it, though the change appeared any thing but desirable for his own comfort and advantage ; for at the time of his

leaving Olney he had every prospect of succeeding the vicar, who was far advanced in years.

Mr. Scott's salary at the hospital was only £80 per annum, and his duties were painful and laborious; but his heart was now too much in his work for him to think of self. He was just the man for the office, and his energies and benevolence there found full scope. The patients were usually the most abandoned characters, and about seven hundred of these miserable outcasts passed from the institution yearly. Seeing the danger to which many were exposed on their dismissal, and that the good which their morals received from the religious instruction, was often lost by a return to their former modes of life; he suggested that a sister asylum should be founded, for the purpose of affording a home for such as were willing to commence a course of honest industry.

The result was the establishment of the Lock Asylum, and the suggestions Mr. Scott made for the regulation of this House of Refuge, led to the founding of the London Penitentiary, and other institutions of a like character in Hull, Bristol, Dublin, &c. For several years he was the principal manager of the asylum. He attended daily to perform family worship, and to instruct the inmates. This was indeed a labour of love, for he never received a farthing for his services, saying the Lord is to be my paymaster. And a good paymaster he found Him, for he had the satisfaction of seeing many brought to feel

the duty they owed to their fellow-creatures, and to a saving knowledge of the truth.

Every page of Scott's history, at this period, is a record of good deeds. He was instrumental in the formation of the British and Foreign Bible Society, and also the Church Missionary Society. To the latter he acted as secretary for several years; and when his removal from London obliged him to give up this office, he undertook to educate young men for missionaries. Whilst he was engaged in that important work, the secretary of the society wrote, requesting him to teach his pupils Susoo and Arabic, as it was necessary that they should understand the languages spoken at the stations to which they were to be sent. Mr. Scott did not know a letter of either tongue; what then was to be done; Confirmed ill health, advanced old age, and a pressure of other duties, might have pleaded a sufficient apology for his not entering on so difficult an undertaking. But the object was important; the young men under his care would, it was hoped, some day, not only preach the gospel where it was then unknown, but also translate the Bible into the African and Indian languages. With self-denial and energy worthy of the cause, master and pupils therefore commenced studying together, and made considerable progress in this way.

We must now, however, speak of Thomas Scott's great work "The Commentary on the Bible." His eventful life is fraught with interest, and the circumstances which gave rise to the Commentary are of a singular character :

he himself little imagined the important consequences to which they would lead.

Mr. Scott, at one time, frequently received invitations to dinner-parties, made up among his flock, for the purpose of free religious discussion. He was not a man to indulge in self-gratification, and wherever he went he contrived to turn his time to some account. At one of these parties, he ventured to make some reference to the unnecessary expenditure on sumptuous repasts, which is often indulged in even by Christian people, whilst the claims of the poor are over-looked. These remarks were by no means personal, but they were too true not to be felt as a reproof, especially by his host, who was a wealthy tradesman. At Mr. Scott's next visit to the same table, a niggardly meal was spread before him, and from that period, his invitations ceased altogether. This occurred during his chaplaincy at the Lock, and the leisure thus afforded him was devoted to the above mentioned work.

The commentary was brought out in weekly parts; for each part the author received the small sum of one guinea, and five-and-twenty copies of the work; but it had not proceeded beyond the fifteenth number, when he received the painful intelligence, that the publisher was at a stand for want of capital. By the aid of friends, and by sinking some legacies which had been left him, Mr. Scott carried the work on himself, but it caused him much anxiety and trouble; and when, at its completion, he

counted the cost, he found that he had written the whole for nothing.

"The work took," he says, "four years, five months, and seven days, with unknown sorrow and vexation." Often, when he thought that he had prepared a sufficient quantity of matter for the ensuing number, under great bodily pain, (for he was distressingly afflicted with asthma,) he would take an emetic, or put on a blister and go to bed. But it was frequently the case, that in a short time after, he was called up again to supply more copy. Some of his books were written—like Melancthon's—with a child on his knee, or whilst rocking a cradle; and with his wife sitting at work by his side, for his pockets were not weighty enough to afford a study and a separate fire.

Notwithstanding Mr. Scott's want of success with the first edition, he ventured on a second, which was much enlarged and improved; but this brought him as large an amount of trouble and as little profit as the last. "I believe," he says, writing to a friend, "I may claim the honour of having done, and doing as much work for nothing, as any man in my line; and, I can assure you, that I should, humanly speaking, have been several hundred pounds richer than I am, had I never published a book in my life; I do not, however, repent, for I trust I have been more useful that way, than by preaching; I own, if I be but helped to pay my way, I had rather it should be said after my death, "He worked hard, and died poor," than that, "He left some thousands behind him!"

As the book had passed through several hands, in the course of publication, a dispute arose concerning the copyright; and in the year 1813, the affair was thrown into Chancery. The suit was decided in Mr. Scott's favour; but when the whole matter was made up, he, to his utter amazement, learned that he was £1200 in debt. His ignorance of the state of affairs arose from the circumstance, that many sets of the work, believed to be sold, were found to be still on the bookseller's shelves. He had laboured cheerfully, with nothing but the hope of doing good as a reward; but the prospect of dying insolvent, which would probably bring discredit on his Christian profession, almost overwhelmed him.

In this exigence, he wrote to some of his friends, earnestly requesting them to try to find customers for his works, which he was now willing to dispose of at a reduced price. The proposal was warmly responded to. One friend at King's College, Cambridge, in reply, sent him £590, which had been collected, as a testimony of esteem and gratitude, from some who had derived benefit from his writings; and also an order for a large number of books.

The interest felt for his situation was general. Orders and presents poured in from all quarters; and in less than three months more than £2000 were raised; which not only relieved him from his painful embarrassments, but left him richer than he had ever been before,—and with the pleasurable assurance of having gained general esteem and affection.

The Commentary was so well received in America, that it went through eight editions, in a short space of time ; and one of the colleges conferred on him the honourable degree of Doctor in Divinity, as a mark of their approbation of this work. This title he had once earnestly coveted, but he was now too unambitious to avail himself of it.

Mr. Scott's last days were rendered more comfortable, by the presentation of the rectory of Aston Sandford. He resided at that place from the spring of 1803, till April, 1821, when he ended his earthly career, in the seventy-fifth year of his age.

"Posthumous reputation !" he remarked, when on his dying bed, "is the veriest bubble that ever deluded a wretched mortal. But posthumous usefulness—in that there is indeed something."—He gained the latter ; for his writings will be read with profit, so long as the Bible shall shed its hallowing influences on our land.

WILLIAM GIFFORD,

EDITOR OF THE QUARTERLY REVIEW.

WILLIAM GIFFORD, in a preface to one of his works, gives an interesting account of his early struggles. The circumstances under which he was placed were of a most depressing nature, but he rose superior to them; and his example is valuable, as it shews that the mind may rise, even in the midst of poverty, neglect, and opposition.

Gifford informs us that his family at one time possessed considerable property, in the neighbourhood of Ashburton; "but whether acquired or inherited," he says, "I never thought of asking; and do not know," adding, "but the matter is of no consequence—no, not even to myself." No share in this property, however, descended to him. The father of Gifford was, he says, "a very wild young man, who could be kept to nothing." This man, in his youth, had run away from school, and gone on board

a man-of-war. On his father's reclaiming him, and sending him again to school, he ran off a second time: he then joined a set of wandering vagabonds. After that he learned the business of a plumber and glazier: and as he came into the possession of a little money by the death of his father, he set up in business for himself at South Molton. He married an amiable young woman, the daughter of a carpenter, at Ashburton; and he might have supported himself and family with credit, had his conduct been steady and persevering. But his wild disposition continued. One day he, in company with several other young men of a similar character, attempted to create a riot in a Methodist chapel. His companions were prosecuted, and he was obliged to fly from the place. His poor wife, deserted and without sufficient means for support, returned to Ashburton. Here she did the best she could to maintain herself and infant (William); and as soon as he was old enough to learn, she put him to a little school. Young Gifford soon mastered the contents of "The Child's Spelling Book," and read the few volumes which made up his mother's library; but these books did not add much to his stock of knowledge, for they were not of an instructive character.

The father returned in 1764, after an absence of eight years. He had been to sea, and had served at the siege of Havannah; but though he had received more than a hundred pounds prize-money, beside good wages, he

returned to his wife and child with a very trifling sum.

He set up in business a second time, as glazier and house-painter ; and William, who was then about eight years of age, was sent to the free-school of the town, which was kept by a person named Hugh Smerdon. At this school the lad learned to write and cypher, but he owned himself, that he made wretched progress ; for he had not by that time acquired a love for study, and his father's example most likely encouraged indolent habits. This man had not learned wisdom from the evils he had brought upon himself by his misconduct. He neglected his business, and frequented a tavern, and he fell a victim to his intemperance before he was forty years old.

Mrs. Gifford was thus left a second time to struggle with difficulties ; her son William was then about eleven years of age, and she had an infant only six or eight months old. She tried to carry on her husband's business for the sake of her children ; but her health was so broken by anxiety and sorrow, that she died in less than twelve months.

"She was an excellent woman," says her son, "bore all my father's infirmities with patience and good humour, loved her children dearly, and died at last, exhausted with anxiety and grief, more on their account than her own."

The poor children were thus left orphans, and they were without a relation or friend in the world. William was not yet thirteen, and

his little brother was under two. A man of the name of Carlile, took possession of what little property was left; on the claim that he had advanced money to their mother. He was William's godfather, and he took him to his home, but the youngest boy was sent to the workhouse, to be brought up by the parish. Carlile made a show of kindness, and sent the lad to school; but in less than three months he grew tired of the expense, and looked round for some employment for him by which he could earn his own living. He sent him to follow the plough; but the boy had, several years previously, received an injury in his chest, which disabled him for such hard labour; and after driving the plough for one day he refused to do so again. William Gifford was then sent on board a coasting-vessel, at Brixham. He was at that time little more than thirteen years of age, and he says:—

“It will be easily conceived that my life was a life of hardship. I was not only a ‘ship-boy on the high and giddy mast,’ but also in the cabin, where every menial office fell to my lot; yet, if I was restless and discontented, I can safely say, it was not so much on account of this, as of my being precluded from all possibility of reading; as my master did not possess, nor do I recollect seeing, during the whole of the time of my abode with him, a single book of any description except the ‘Coasting Pilot.’”

His master, he says, was a gross and ignorant, but not an ill-natured man; and his mis-

tress treated him with unvarying kindness, "moved, perhaps, by my weakness and tender years. In return," he adds, "I did what I could to requite her, and my good-will was not over-looked." One of the most pleasing traits of Gifford's character was, his grateful feelings towards any who were kind to him in his season of trouble. There were many who pitied the orphan boy, and he was removed from this laborious employment; by means of a few poor fisherwomen of Brixham. These women went twice a-week to Ashburton, with their fish. They had known Gifford's parents, and they were distressed to see him in his present situation; for they often met him running about the beach, in a ragged jacket. They frequently talked of him to the people at Ashburton, and their tale awakened feelings of sympathy for the lad, and indignation towards the person, who, whilst professing to befriend him, had reduced him to such a state. In consequence of this report, Carlile had the boy home again, and once more sent him to school. Gifford's heart now expanded to kindlier sentiments, and fairer views, and having learned to prize opportunities of instruction, he set out on his studies with ardour. "My progress was now so rapid," he says, "that in a few months, I was at the head of the school, and qualified to assist my master on any extraordinary emergency. As he usually gave me a trifle on these occasions, it raised a thought in me, that by engaging with him as a regular assistant, and undertaking the instruction of a few evening

scholars, I might, with a little additional aid, be enabled to support myself. My ideas of support, at this time, were of no very extravagant nature. I had, besides, another object in view. Mr. Hugh Smerdon, my first master, was now grown old and infirm; and I fondly flattered myself that, notwithstanding my youth, I might possibly be appointed to succeed him. I was in my fifteenth year when I built these castles in the air: a storm, however, was collecting, which unexpectedly burst upon me, and swept them all away."

When Gifford mentioned his plan to his godfather, he threw contempt upon it. He said he knew more than enough already; that he considered that he had done his duty towards him; and that he was then making arrangements with a cousin of his own, who was a shoemaker, to take him as an apprentice, without fee. Gifford felt that it would be useless to remonstrate, so he suffered himself to be bound until his twenty-first year; and he entered upon his new duties in sullen silence.

"As I hated my new profession with a perfect hatred," he says, "I made no progress in it." He became the drudge of the family, and felt himself humbled and depressed in spirit; still he did not quite give up the hope of one day succeeding Mr. Smerdon, and he secretly embraced every opportunity for pursuing his studies. His seasons of leisure were not very frequent; and when the way in which he employed them was discovered, they became less so. He could not, at first, guess the motive

for this ungenerous conduct, but he afterwards found it arose from jealousy, as his master was anxious that his youngest son should fill the situation to which he aspired.

Gifford at that time possessed but one book, a treatise on Algebra— which was the gift of a young woman who had accidentally found it in a lodging-house. This book he looked upon as a treasure ; but it was a sealed book to him, for it supposed the reader to be farther advanced in the study than he had proceeded. To overcome this difficulty he had recourse to the following expedient :—

“ My master’s son,” he says, “ had purchased ‘ Fenning’s Introduction ;’ this was precisely what I wanted : but he carefully concealed it from me, and I was indebted to chance alone for stumbling upon his hiding-place. I sat up for the greatest part of several nights successively ; and, before he suspected that his treatise was discovered, I had completely mastered it. I could now enter upon my own ; and that carried me pretty far into the science.”

He had, however, another difficulty to contend with ; this was the want of writing materials to work his problems with. He had neither pen, ink, or paper ; nor had he a farthing in money, wherewith to purchase those things, neither had he a friend to whom he could apply for help. There is an old adage which says, “ Where there’s a will there’s a way,” and there is much truth in the assertion.

William Gifford had recourse to the expedient of beating out pieces of leather, as smooth

as possible, to serve as paper; and a blunt pointed awl was made to answer the purpose of a pen. Then he carried out much of the calculation mentally, so that altogether he succeeded pretty well.

Up to that time he had never thought of writing poetry; and his first attempt at verse-making was under the inspiration of rather a droll incident.

A man was engaged to paint a lion, as a sign-board to a public-house; but not being very skilful, we should suppose, in the use of his pencil, he represented a dog. One of Gifford's companions wrote some verses on this ludicrous mistake; Gifford was pleased with them, but thought he could write something which would be more to the purpose. He tried, and his shopmates so highly applauded this composition, that he was induced to make further attempts, when circumstances occurred to call them forth. In a short time he had about a dozen of such pieces. Speaking of these efforts, many years afterwards, he says:—

“Certainly, nothing on earth was ever so deplorable: such as they were, however, they were talked of in my little circle, and I was sometimes invited to repeat them, even out of it. I never committed a line to paper, for two reasons; first, because I had no paper; and secondly,—perhaps I might be excused from going further, but in truth I was afraid, as my master had already threatened me, for inadvertently hitching the name of one of his customers into a rhyme.”

These recitations called forth great applause, and some-times trifling collections were made for the young poet, as a return for the pleasure he had given.

"I have received sixpence in an evening," he says.

Small as these sums were, they appeared to him, as he had so long been without money, as a "Peruvian Mine." This money supplied him with paper, &c., and also with other books on geometry and algebra: he did not, at that time, follow poetry as an amusement; he only turned his thoughts into that channel when he was in want of money to pursue higher studies. It was a season of peculiar temptation to Gifford, for his recitations were generally made at public houses. It does not appear, however, that he spent any part of the money he received, in drink; and the fact, that he exercised sufficient strength of mind to resist such temptations, redounds as much to his credit as his perseverance in self-culture.

But even these simple means for improving his mind, were soon denied him. His master heard of his continued attempts at verse-making, and feeling displeased at his not taking more interest in his concerns, he chose to lay it to the charge of his writing poetry.

Poor Gifford was accordingly ordered to give up his books and papers. He refused, but his garret was searched, and the few old volumes which he had struggled so hard to obtain, were carried off by force. This trouble was followed soon after by another, even more hard to bear.

Mr. Smerdon died, and a person not much older than himself, and not so well qualified, obtained the situation he had so long desired. Gifford's spirit was completely crushed by this last disappointment, and he sunk into a state of bodily and mental apathy.

He looked back upon that part of his life with little satisfaction. "It was," he says, "a period of gloom and savage unsociability." Some palliation for such feelings of discontent, may be found in the fact, that he was then alone in the world, friendless and unpitied.

His little brother had been bound by the parish, to a husbandman, when he was only seven years of age. He endured many hardships; and, when nine years old, he met with an accident, and broke his thigh. William availed himself of that opportunity to teach him to read and write, and he would gladly have helped him in other ways, had he been able. When he got better, William persuaded him to try the sea, and he was allowed to do so, on condition that his master should receive his wages. Before the time when William's circumstances improved, so that he could have served his brother, the poor youth fell sick and died.

Gifford's season of moroseness did not last long. He possessed kindly feelings, and warm affections; and after a time he tried to win back the regard of those few who had been used to smile on him, but whom of late he had repulsed. His hopes revived, too, for the term of his apprenticeship was drawing to a close; and he thought

that when it had expired he would open a private school.

Some of the before-mentioned poems came to the ears of a surgeon of the town, of the name of Cookesley. This gentleman asked some questions regarding the author, and Gifford's sad but simple tale was told to him. He was a man of enlarged benevolence, and though far from rich, he proved a valuable friend to the young man.

"I was found," Gifford says, "in my twentieth year, by Mr. William Cookesley; a name never to be pronounced by me without veneration. His first care was to console; his second, which he cherished to the last moment of his existence, was to relieve and support me. The plan that occurred to him, was naturally that which had so often suggested itself to me. There were, indeed, several obstacles to be overcome; I had eighteen months yet to serve; my handwriting was bad, and my language was incorrect; but nothing could slacken the zeal of this excellent man. He procured a few of my poor attempts at rhyme, dispersed them amongst his friends and acquaintances, and, when my name became somewhat familiar to them, set on foot a subscription for my relief. I still preserve the original paper; its title was not very magnificent, though it exceeded the most sanguine wishes of my heart. It ran thus:—'A subscription for purchasing the remainder of the time of William Gifford, and for enabling him to improve himself in writing and English grammar.' Few contributed more than five shil-

lings, and none went beyond ten-and-sixpence; enough, however, was collected to free me from my apprenticeship (six pounds was paid to his master) and to maintain me for a few months."

His father and friend, as he gratefully styles Mr. Cookesley, persuaded the same parties to renew their subscriptions, and he was kept at school for twelve months longer.

"Such liberality was not lost upon me," he says; "I grew anxious to make the best return in my power, and I redoubled my diligence."

In two years and two months from the day of his "emancipation," his preceptor (the Rev. T. Smerdon) pronounced him fit to enter the university. His good friend now, through the interest of a gentleman of his acquaintance, gained for him a little appointment at Oxford, and engaged to send him assistance from time to time. Whilst under Mr. Smerdon, Gifford had once made a translation of the tenth satire in Juvenal, as a holiday exercise; and after that, he translated several of the satires, for the purpose of shewing to his benefactors, that they might judge of his progress in his studies. During his stay at Exeter College, however, his friends proposed that he should translate the whole of the work, and bring it out by subscriptions, to increase his means for support. The work was advertised to be printed in quarto, with notes, and the price was to be seven shillings; one half of the money to be paid at the time of subscribing, and the other half on the delivery of the book. This work caused Mr. Gifford considerable anxiety and

trouble. Being young and inexperienced when he engaged in it, he did not perceive the difficulties which would attend such an undertaking, nor his own deficiencies. His friend Mr. Cookesley was a man of taste and judgment, and he offered to revise the book ; but that gentleman died suddenly, when Gifford had not long been engaged upon it, though he had pledged himself to the public for its completion. Under these painful circumstances, Gifford, for the sake of his credit, endeavoured to carry on the work ; but with the death of his friend, his interest ceased, and he found himself quite unequal to the effort.

“After a few melancholy weeks,” he says, “I resumed the translation, but found myself utterly incapable of proceeding. I had been so accustomed to connect the name of Mr. Cookesley with every part of it, and I laboured with such delight in the hope of giving him pleasure, that now, when he appeared to have left me in the midst of my enterprise, and I was abandoned to my own efforts, I seemed to be engaged in a hopeless struggle, without motive or end ; and this idea, which was perpetually recurring to me, brought such bitter anguish with it, that I shut up the work with feelings bordering on distraction.”

A few months later Mr. Gifford again took up his translation ; for he felt very anxious to fulfil his engagement to his subscribers. He discovered, however, or he at least modestly thought, that the partiality of those friends who had advised him to make the attempt, had led

them to over-rate his abilities. Again he threw aside the work ; but he honestly resolved to return the money that had been advanced by the subscribers. The money was accordingly repaid, with few exceptions. These were, where the residences of the subscribers were unknown to him, or others whom he feared he should offend, should he offer such small sums. For the sake of his credit with those gentlemen, he secretly determined to complete the translation at some future time, when he should feel himself qualified for the task.

Mr. Gifford's life was made up of incidents of singular interest. It was fraught with melancholy, yet it was marked by particular mercies. He formed, at this period, another valuable friendship, we will not say by chance, but in a most unlooked-for manner. He became acquainted with a gentleman who was staying for a short time at Oxford ; and when this gentleman left the place, and returned to London, it was arranged that Gifford should write to him, and direct his letters under cover to Lord Grosvenor. One day, Gifford forgot to put his friend's direction on his letter ; and his Lordship, thinking it was intended for himself, opened and read it. He felt much interested in the writer, and asked questions regarding him, saying he should like to see him. Mr. Gifford was accordingly introduced to his Lordship.

"On my first visit," he says, "he asked me what friends I had, and what were my prospects in life ; and I told him I had no friends,

and no prospects of any kind. He said no more ; but when I called to take leave, previous to returning to college, I found that this simple exposure of my circumstances had sunk deep into his mind. At parting, he informed me that he charged himself with my present support, and future establishment ; and that till this last could be effected to my wish, I should come and reside with him. These were not words of course," Gifford adds, "they were more than fulfilled in every point. I did go and reside with him ; and I experienced a warm and cordial reception, a kind and affectionate esteem, that has known neither diminution nor interruption, from that hour to this—a period of twenty years!"

Gifford was now settled in competence and peace ; but the translation he had failed to accomplish, was frequently on his mind, and he proceeded with the work ; though he expressed himself seriously doubtful of his ability to do it justice.

"I have wished a thousand times," he says, "that I could decline it altogether ; but the ever-recurring idea, that there were people of the description already mentioned, who had just and forcible claims upon me, for the due performance of my engagement, forbade the thought ; and I slowly proceeded towards the completion." "To me, this laborious work has not been happy ; the same distressing event that marked its commencement, has embittered its conclusion." His kind friend and patron lived to see *Juvenal* completed ; but a few days

after its appearance before the public, Gifford was called to the sad duty of following him to the grave.

Mr. Gifford's scruples with regard to his subscribers, were highly creditable to him; and the fact, that it was written from such motives, gives additional interest and value to the work. This was his principal work, though he is, perhaps, better known as the Editor of the "Quarterly Review." It is said, that Mr. Gifford first proposed this Review. It is considered one of the most talented publications of its day, and it met with very great success. As a reviewer, William Gifford's character does not appear in so amiable a light, as under the general circumstances of his life. He was severe in his criticisms, and he did not, at all times, do justice to the merits of those authors whose opinions or principles were opposed to his own.

His fame was now well established, and his services met with a liberal return. Through the influence of friends, he received two appointments, which might be deemed sinecures. One was, that of comptroller of the lottery, for which he received a salary of £600 yearly; and the other was paymaster of the band of Gentlemen Pensioners, at £300 per annum. To these, were added, a salary of £1500 a-year as Editor of the Quarterly Review.

William Gifford died in his seventy-first year, at Westminster, on the 31st of December, 1826. He died rich, leaving the bulk of his property to the son of his early benefactor.

His genius won the admiration of his countrymen. His amiability gained for him the affection of a large circle of friends. But, perhaps, the greatest benefit which he conferred on society, is his example of perseverance under difficulties.

SIR WILLIAM HERSCHEL,

ASTRONOMER.

WILLIAM HERSCHEL (born in 1738,) was the son of a humble musician, residing at Hanover. He was the second of four sons, all of whom were brought up to their father's profession. William possessed a natural talent for music, and it is said he qualified himself for a musician, with very little teaching. In consequence of his showing in boyhood indications of an active and enquiring mind, his father gave him a somewhat better education than his brothers, and he was allowed to learn French. His master, who had a turn for metaphysics, and the sciences connected with it, finding he had an apt scholar, gave him some instruction in those branches, and thus encouraged the latent seeds of genius in the youth's mind. At the age of fourteen, William was placed in the band of Hanoverian Guards; and a detachment of that regiment being ordered to England, a

few years after, he and his father accompanied it. The elder Herschel did not remain long in this country, but returned to Germany, leaving his son behind him, at his own request. William, like many other young men, wished to try his fortune in London; with this view he gave up his situation as musician in the regiment, and endeavoured to meet with employment as a teacher of music.

After enduring many hardships, all of which he bore with remarkable patience, and the most steady adherence to good principles; he succeeded in obtaining an appointment from the Earl of Darlington, to go to the county of Durham, and give instruction to the band of a regiment of militia, which he was raising there. This object accomplished, young Herschel remained in the North of England for several years, giving lessons in music to private pupils, at the same time, however, devoting nearly the whole of his leisure to the improvement of his mind.

He not only made himself master of the English language, but also of Italian, Latin, and the elements of Greek.

When about twenty-seven years of age, a Mr. Joab Bates, who was attracted by the young man's merits, offered to try to obtain for him the situation of organist, at Halifax. There were six candidates, however, for the office, and Herschel had to take his chance amongst the rest. The organ was built by Snetzler, and he was to be present at the time the candidates made trial of their skill. Amongst these was

a person of the name of Wainwright, from Manchester, who had obtained some considerable eminence as a musician. The organ was of an unusually powerful kind, and when this gentleman played upon it in his customary style, the builder, in terror for his instrument exclaimed, "He ran over de keys like one cat, he will not allow my pipes time to speak!" Whilst the others were performing, a friend of Herschel's asked him what chance he thought he had of obtaining the situation, "I don't know," was his reply, "but I am sure fingers will not do." When it came to Herschel's turn to ascend the organ loft, he produced a volume of slow rich harmony, which perfectly astonished all present; and having concluded this effusion, he played the Old Hundred Psalm better than any of his opponents. Snetzler, in delight exclaimed, "Aye, aye, tish is very goot, very goot inteet. I will luf tis man, he gives my pipes room for to speak." Herschel was asked by what means he had produced such an astonishing effect; upon which he replied, "I told you fingers would not do." He then drew two pieces of lead from his waistcoat pocket, saying, "One of these I laid on the lowest key of the organ, and the other on the octave above, and thus, by accommodating the harmony, I produced the effect of four hands instead of two." His superiority of skill, together with the interest of his friend Mr. Bates, procured him the situation.

During Mr. Herschel's stay at Halifax, he formed several pleasant acquaintances with

persons of similar tastes. He pursued his studies also, and made some considerable proficiency in mathematics, without any regular master. After a while, however, he left the north of England, and removed to Bath, where the office of organist of the Octagon Chapel was offered him; beside an appointment for himself and one of his brothers in the band, kept by a Mr. Linley, in the pump-room

In this city Mr. Herschel's time was so occupied by his professional duties—for he added private tuition in music to his other engagements, that few men would have thought of pursuing severe mental labour in addition.

We are told however, that after a fatiguing day's work of fourteen hours, he would, on his return home, employ himself in his beloved studies, which he accounted relaxation. It was about this time that his attention was first drawn to the science to which he afterwards devoted his life. Some recent discoveries in astronomy arrested his mind, and awakened a powerful curiosity to himself behold those wonders in the heavens, of which he had read so much. With this view, he borrowed a two-foot Gregorian telescope of an acquaintance. He was so much pleased with this instrument, that he next resolved on having one of his own, and therefore applied to a friend in London to purchase one for him, somewhat larger than the one he had borrowed. Hearing however, that the price of such a telescope was beyond what his means could afford, he came to the resolution of attempting to make one for himself.

After encountering a long series of difficulties, which can only be conceived by those who are well acquainted with the construction of such instruments, he at length succeeded in producing a five feet reflector, by which he had the gratification of observing the ring, and satellites of Saturn. Not contented with this triumph, he resolved on doing yet greater things; he proceeded, in succession, in making instruments of seven, ten, and even of twenty feet. In making the mirrors for these telescopes, his perseverance was indefatigable. It is said, that for his seven-feet reflector, he actually finished and made trial of two hundred mirrors, before he found one that would satisfy him. His practice was, when he commenced preparing a mirror, to continue working at it, without intermission, for twelve or fourteen hours. He was so fearful lest, when his hand was once in, as it is termed, for the work, his mirror should be injured by leaving off, even for a moment, that what food he took on such occasions was put into his mouth by his sister. Meanwhile, our astronomer's time was chiefly engaged upon his profession as a musician; that being the only means by which he could obtain a maintenance. He was so eager to make the best of every opportunity for pursuing his scientific labours, that he would often steal quietly from the room, during intervals in the musical performance, and give a little time to his telescope.

"So gentle and patient a follower of science under difficulties," says one, speaking of him,

“scarcely occurs in the whole circle of biography.”

About the end of the year 1779, Mr. Herschel began to make a regular survey of the heavens, star by star. In the course of this examination, he discovered, that one of the heavenly bodies, which had hitherto been supposed to be a fixed star, was gradually changing its place. This discovery was made on the 13th of March, 1781. He afterwards became fully satisfied, that this luminary was a planet, belonging to our system: on the outside of Saturn, at a distance of nearly eighteen hundred millions of miles from the sun. By the aid of his instruments, he further discovered that this planet is about eighty-four times the size of our earth, and that its year is as long as eighty-three of ours. Herschel made known his observations to the Astronomer Royal, who concluded that the luminary could be nothing else than a new comet. Farther investigation, however, proved his error, and the truth of Herschel's assertion. The Royal Society then elected him a fellow of their body, and decreed him their annual gold medal. The astronomer gave the name of *Georgium Sidus*, or Georgian star, to the new planet, in honour of the King of England (George III). Continental astronomers called it *Herschel*, from its discoverer; but it has finally been named *Uranus*, from Urania, the muse of astronomy, which title was thought more appropriate, because all the other planets bear mythological names. Herschel afterwards discovered successively,

several of the satellites belonging to the new planet, and several other important particulars regarding it.

The discovery of the Georgium Sidus established the fame of Herschel, and George III. settled a pension of £300 a-year upon him, in order that he might give up the profession of a musician, and devote himself entirely to astronomy. The title of Astronomer Royal, was also added. He now left Bath, and took a house at Slough, near Windsor; and from that time, the construction of telescopes, and observations on the heavenly bodies, formed the occupation of the remainder of his life. He constructed an enormous telescope, in his garden at Slough, the tube of which was forty feet long. It was confidently expected, that this instrument would lead to further and more important discoveries; but the mechanical difficulties attending so vast a structure, were too great to be overcome in the then existing state of science, and his great telescope was really of very little use. It was with a much smaller instrument, that he made his observations on the moon, and took that general survey of the heavens, which led to so many other important discoveries, and nice calculations of distances.

So ardent was Herschel in the pursuit of his favourite study; that it is said, he, for many years, was never in bed at any time when the stars were visible: and that, whatever was the season of the year, he was in his garden in the open air, and generally without an attendant. In his investigations, he was, it appears, mate-

rially aided by a younger sister, Miss Caroline Herschel. This lady took down his observations as he dictated them, whilst he still kept his eye upon the glass. Beyond his actual discoveries, Herschel threw out some sublime speculations, which have since been fully confirmed. One of these is, that our solar system has a movement of its own amidst the other stars, and that this movement is slowly carrying us towards a point in the constellation of Hercules.

The scientific world received these new truths with astonishment and reverence; and the degree of Doctor of Laws was conferred upon the astronomer, by the University of Oxford; an honour which is very rarely given to any individual who has not been reared in the college.

The fame of Herschel's knowledge of the heavenly bodies, it appears, induced his rustic and ignorant neighbours to imagine, that he held some mysterious communion with the stars; in fact, that he was a sort of magician; and with this idea in his head, a farmer called on him one day, begging him to tell him when it would be the best time for him to cut his hay. The summer had been rainy, and he was therefore anxious to embrace a propitious season. The Doctor smiling at his simplicity, pointed through the window to a meadow adjoining the house, in which lay a crop of hay completely swamped by the rain. "Look at that field, my friend," said he, "and when I tell you it is mine, I think you will not need another

proof to convince you that I am no more weather-wise than yourself, or the rest of my neighbours."

With all his genius, Herschel was one of the most humble and unassuming of men. He put forth his important discoveries with an air of genuine modesty; and received the honours conferred on him with the same meekness which had characterized him when he was poor, and comparatively unknown. Indeed, his conduct was in every point worthy of esteem, being marked by great sweetness of temper, and a natural simplicity, which the homage of an admiring world could not divest him of.

In the year 1816 George IV. (then Prince Regent) bestowed on him the Hanoverian and Guelphic Order of Knighthood.

Sir William Herschel died August 23, 1822, in the eighty-third year of his age: full of honours, and rich in the regard and love of all who knew him. His son, Sir John Herschel, has not only succeeded him in his title, but in his scientific and literary abilities.

THE BROTHERS MILNER.

JOSEPH, AUTHOR OF CHURCH HISTORY; AND ISAAC, DEAN
OF CARLISLE.

JOSEPH and ISAAC MILNER were born at Mabgate, in the neighbourhood of Leeds; Joseph on the 2d of January, 1744; Isaac, January 11th, 1750. They went together to a grammar-school at Leeds.

Joseph's industry, and talent—which latter shewed itself peculiarly in extraordinary powers of memory,—gained for him the notice and regard of his instructor, the Rev. Mr. Moore, who resolved that he should be sent to college, when he could be prepared for entering. The father died, however, whilst the lads were quite young, and the circumstances of the family would not then allow of the continuance of their studies. Indeed, by their father's death, the boys were not only obliged to work for their own support, but their widowed mother, who was in infirm health, was dependent on their exertions. They had learned

something of their father's business, which was weaving. In the summer the youths were at their spinning-wheels, by day-break ; and in winter they commenced their work by the light of a candle. Their daily toil was pursued with willingness, and lightened by cheerfulness of spirit ; and their brief seasons of leisure were spent in the perusal of the few books they possessed, or could borrow of their neighbours.

The filial piety, industry, and studious habits of the lads, made them objects of interest to their neighbours, who often spoke of them with admiration. Their simple tale reaching the ears of some liberal-minded persons in Leeds, a subscription was raised to pay for the education of one of the brothers ; and the choice fell on Joseph, who was again sent to the grammar-school. Isaac went cheerfully on with his work,—and so far from the difference in their position and apparent prospects in life awakening jealousies, the tie of fraternal love was drawn still closer ; for Joseph made his brother a sharer in his advantages, by repeating to him, every night, the lessons he had himself received during the day.

Three years passed very pleasantly in this manner ; but at the expiration of that time, Joseph, who was then eighteen, having gone through the usual course of instruction preparatory to such a step, was sent to college.

Isaac was thus not only deprived of his companion, but of his instructor also : he did not, however, relax either in his studies or his duties. He was bound apprentice to a weaver,

and he went through his work very contentedly. Whilst his hands were busily employed with the loom or the wheel, his thoughts were very frequently occupied by subjects of a very different nature : he often amused himself in composing verses at these times.

Joseph Milner took his degree of B.A. in 1766, and gained the chancellor's second gold medal for classical knowledge. He entered the Church soon after. He was appointed afternoon lecturer of the principal church at Hull, and also head-master of the grammar-school. Enabled thus to depend on his own resources, his first thoughts were directed to how he could best assist his brother Isaac. With this object in view, he wrote to a clergyman in Leeds, requesting him to call upon his brother, and examine him as to what progress he had made since his departure from home, saying he wished to engage him as an assistant in his school, but that he could not feel justified in doing so until he was qualified for the office. The clergyman accordingly waited on the young weaver, who was then nineteen years of age : he found him at his loom, with a copy of Tacitus by his side. The result of the conversation was Isaac's removal to Hull, and his appointment to the situation. Joseph also took his mother, and the two orphan children of an elder brother, named Samuel, to live with him.

Isaac, when writing his brother's life, mentions, with very great affection, Joseph's conduct towards himself at this time. He again

became his instructor; and Isaac now commenced that literary career which he pursued with so much credit.

William Wilberforce was a pupil at the Hull grammar-school, at the time it was under the Rev. Joseph Milner's care, and whilst his brother was his assistant; and a very warm friendship was then formed between the future advocate for freedom, and Isaac Milner—a friendship which was only dissolved by death. When they were both young men, several interesting conversations took place between them, which led to important and happy results.

The friends had agreed to make a tour together on the Continent, and they met at Scarborough with that intention. At a public table in that town, the conversation turned on the character of a particular clergyman. Mr. Wilberforce spoke of him as “a good man, but one that carried things too far.” “Not a bit too far,” said Milner.

They renewed the topic as they walked together on the beach, in the evening,—when Milner asked his friend what he meant by saying that the gentleman in question carried things too far. He inquired on what ground he pronounced that judgment,—observing that, when speaking of going too far, some standard must be given. Now, he asked, was the standard referred to the standard of the Bible, or what was commonly approved and practised by our fellow-men? Wilberforce felt the full force of this argument; he saw that he was himself

in error, in not going far enough, and acknowledging all the requirements of the Gospel. He was at that time a thoughtless young man, fond of gaiety; and he afterwards said, that had he been aware of Milner's opinions on religious subjects, he would not have made the proposal for him to go with him.

As they journeyed together, religion frequently became the subject of conversation. Wilberforce did not then feel so averse to it; for what had passed at Scarborough had aroused in him a serious desire for the discovery of truth.— They read the Greek Testament together, and Milner explained his views of various passages, “until, by degrees,” says Mr. W——, “I imbibed his sentiments.”

In 1770, Isaac Milner entered as a sizar at Queen's College, Cambridge, and he carried off some of the highest University honours. He became in succession B.A., Senior Wrangler, Fellow of the College, Jacksonian Professor of Experimental Philosophy, D.D., Master of Queen's College, Lucasian Professor of Mathematics, and in 1791, Dean of Carlisle. Twice he was appointed Vice-Chancellor, in the years 1792 and 1809.*

Joseph Milner is most generally known as the author of the “History of the Church of Christ,” which was his principal work; but his preaching was very popular. He was an animated and fearless minister of the gospel, and his church was crowded by attentive hearers.

* When the youths first visited Cambridge, they walked there, with occasional lifts in a waggon.

His openness of character, and rectitude of conduct, combined with cheerfulness of disposition, kindness of heart, and deep earnest piety, gained him the esteem of his townsmen; and the mayor and corporation elected him Vicar of Hull. He did not covet this office, but, on the contrary, expressed fears lest he should be tempted, in such a position, to be less faithful to his people. His fidelity to the cause of Christ was not, however, put to the test in this manner, for his death took place a few weeks after his election. He died, November the 15th, 1797, in the 54th year of his age. Nearly his last words were, "Jesus is doubly, doubly precious to me."

Joseph Milner had been Vicar of North Ferriby, near Hull, for seventeen years before his death. A monument was erected in the High Church of Hull, to his memory, by a number of gentlemen, who had once been his pupils. The following extract from the Introduction to his "History of the Church" explains something of the author's plan for carrying out the work.

He first states that in all ages of the Church there have existed "men who have been *real*, not merely *nominal*, Christians. It is the history of these men," he says, "which I intend to write. It is of no consequence with respect to my plan, nor of much importance, I believe, in its own nature, to what *external* Church they belonged. I intend not to enter, with any nicety, into an account of their rites and ceremonies, or forms of church-government,

much less into their secular history. Even religious controversies shall be omitted, except those which seem to bear a relation to the essence of Christ's religion, and of which, the history of his real Church requires some account. Let not the reader expect that the actions of great men, (great in a secular view,) will be exhibited to his notice. Nothing but what appears to belong to Christ's kingdom shall be admitted. Genuine piety is the only thing which I intend to celebrate."

Joseph Milner only lived to finish the third volume of this great work; his brother, the Dean, collected from his M.S S., matter for a fourth volume, and afterwards completed the work. Isaac Milner subsequently revised the three former volumes, and prepared the whole for a second edition. The University of Cambridge published an edition of the work, at their own expense, as a testimony of respect for the author.

Dean Milner suffered, for many years, from ill-health, so that his literary labours were often pursued with great effort. He was affectionate and amiable in his family relations, and he ever remembered with gratitude, those who had shown kindness to him and his brother in their season of adversity. One gentleman, a Mr. Tillotson, who had assisted the brothers in their early struggles, spent his age in the Dean's house. The interchange of kindly offices between them continued to the last; Milner studied as far as possible to gratify the wishes of his aged friend; and he, in return, attended

him in his seasons of sickness, with almost fatherly affection.

Dean Milner died at the house of his friend, Mr. Wilberforce, at Kensington Gore, April 1st, 1820, aged seventy-one.

DR. ALEXANDER MURRAY,

LINGUIST.

A STRIKING example of genius and perseverance overcoming what might appear insurmountable obstacles, is given in the life of Alexander Murray. His father was a shepherd in the stewartry of Kirkcudbright, where the family had followed a pastoral life for several generations. Alexander was the eldest child of a second wife. He was born when his father was seventy years old, at Dunkitterick, October 22, 1775. Robert Murray, the father, was a healthy vigorous man, who had a smattering of learning, and his general good conduct entitled him to respect. He was the owner of a little property, too; he had four cows, and two or three scores of sheep, the fruits of his industry. He brought up all his sons by his first wife to the occupation of shepherds, and he intended that Alexander should follow the same kind of life. The boy was not, however,

fitted by Nature for such an employment, for his constitution was not robust like his brothers, —he was rather near-sighted, too ; a defect which his father was not aware of, and length of vision is indispensable to a good shepherd.

Alexander was looked upon as a lazy, useless lad ; for he frequently made mistakes, and often lost the sheep he was set to take charge of. "I was sedentary, indolent, and given to books, and writing on boards with coals ;" he says, When he was about six years old, his father bought him a catechism, which had the letters of the alphabet printed on the outside ; and from this book he began to teach him to read. The catechism being "a good book," was thought too precious for the child to handle ; it was therefore locked up, and only brought out on special occasions. The shepherd, however, supplied the deficiency of books, by the following ingenious contrivance. Throughout the winter evenings, as the family sat round the blazing fire on the hearth, he drew letters in a *written* hand, on the board of an old wool-card, using as a pen, the black end of a heather stem, which had been charred in the fire. His son afterwards said, that by these means he "became a writer, as well as a reader." After a while, young Alexander was trusted with the catechism, which he soon learned to spell out ; he then became possessed of a Psalm book, afterwards of a new Testament, and lastly of a Bible. The Bible was a treasure which he had long coveted ; he had heard it read every day at their family worship, but he had never

been permitted to touch it. Now that he had a Bible of his own, he read constantly from its sacred pages : he had previously been so anxious to read the Scriptures, that having observed an old loose-leafed copy, stowed away in some part of their cottage, he had carried it off, a few pages at a time, and read it in secret. The narratives arrested his attention, and interested his feelings ; and he committed to memory, many of the Psalms so that through life his mind was enriched from its precious stores. Young Murray was regarded with wonder by his rustic neighbours ; they were astonished to find him so conversant with the Scriptures. His retentive memory, and aptness at learning amazed them, and a general desire was felt that he should be sent to school. His father was frightened at the mention of paying "school wages," and he very profoundly thought, that as the boy's forefathers had been shepherds, and as all his brothers were shepherds, he ought to be a shepherd also.

The poor youth's heart began to fail him, at the thought of spending his days at so uncongenial an employment ; and no other occupation for a time offered. But one harvest time, an uncle, a brother of his mother's, paid them a visit. This gentleman had made a little money as a travelling merchant, and when he was made acquainted with his nephew's abilities, he kindly engaged to pay for his being sent to school. The school fixed upon was at New Galloway, a place six miles distant from Alexander's home ; but it was further arranged, that he should lodge

in the house of his mother's father, who lived only a mile from the town.

Young Murray was then nine years of age. His awkward manners and rude mode of speech, for a time made him an object of ridicule amongst the boys ; at least among those of his school-fellows who had not sufficient good sense and good feeling to overlook such things, which, in his case, were but the natural result of his family associations. He rose superior, however, to this humbling position, and soon gained the respect of his school-mates, by reaching the head of his class.

Unhappily, his grandfather, who was aged, neglected his morals, and allowed him to associate with improper companions ; boys who were in the habit of swearing and telling falsehoods, and who were up to all sorts of tricks. Young Alexander was not, however, long exposed to their evil influence ; for he had only attended the school a few months, when he was taken ill of a fever, which obliged him to be sent home. When his health was restored, he was put to his former employment of herding cattle, and the next three years were spent in that manner ; but he did not lose his time ; every penny he received was spent in the purchase of books. These books he carried out with him to his daily work, and he read them on the hill side, or in some quiet glen. Fortunately he was able to borrow several valuable works ; he obtained the writings of Josephus in this way, and " Salmon's Geographical Grammar," with which he was highly delighted,

especially with the part which refers to the various languages.

"I got immense benefit from Salmon's book," he says, "It gave me an idea of geography and universal history, and I actually recollect to this day almost every thing it contained. I often admired, and mused on the specimens of the Lord's Prayer, in every language, found in Salmon's Grammar."

When little more than twelve years old, he was engaged in the winter season, as a teacher in the family of two farmers, who lived in a neighbouring parish; and whilst instructing his pupils, he increased his own stock of knowledge. The payment he received for his services in this way was not very liberal; the amount for the season being only 15s. or 16s. This money was spent in the purchase of books on history and arithmetic.

Murray returned home in the March of 1788, and the following year, he and his family left Kitterick, on account of his father's having taken a situation at a place four miles from Minnigaff. Murray embraced the opportunity this removal offered, for further improvement, and he entered himself at the school at Minnigaff. Three days in a week in the summer season was, however, all the time he could spare for that purpose.

His progress was considerable whilst he remained at this school; for, in addition to the instructions he received from the masters, he contrived to read all the books left in the room by the scholars. This he did, by coming to tho

school-room every morning, an hour before the school opened. During the ensuing winter, Murray was again engaged as a teacher, in the families of several of the neighbouring farmers. He usually remained six weeks at a time in one family, and then removed for the same length of time to another. The following summer was spent by Murray at the Minnigaff school, and he now tried to acquire a knowledge of the French language. His object in studying that language was, to fit himself for the situation of a clerk, for he thought that he should possibly be able to gain an appointment to go out in that capacity, either to America, or to the West Indies. He accordingly borrowed a French grammar; his master gave him considerable assistance; and with these helps and by studying very hard, he soon became acquainted with the language.

Though our young shepherd was so devoted to these sterner literary pursuits, he sometimes indulged in those of a lighter character. He had read Ossian, and several other poems of a similar description; and whilst sauntering over the mountains around his native village, he was fired with the desire to write a poem himself.

"In the hour of ignorance and ambition," he said, in an after period of his life, "I believed myself capable of writing an epic poem." The subject he chose, was the exploits of Prince Arthur, and the style of composition, blank verse. He wrote several thousand lines of this poem, and he read it occasionally to his friends, who

were loud in its praise. Murray had, however, the good sense to see that part of this admiration arose from partiality, and part from want of knowledge of the art of composition. He very wisely, therefore, determined to compare it with poems of acknowledged merit. He studied Milton's, and then perceived that his own was deficient in most of the requisites to true poetry. This was a painful and humbling discovery, especially, as he had hoped that its publication would supply him with the means to go to college; but, on becoming acquainted with the faults in his own composition, he, at once gave up his pretensions to being a poet; and, accordingly committed the whole production to the flames.

This simple act displayed great moral heroism. It showed a mind superior to the promptings of vanity and egotism, which frequently blind men to their own deficiencies. Murray, by destroying his epic, is as worthy of admiration, as though he had produced one to perpetuate his name.

Murray's attention was chiefly turned to the study of languages; and his mind was so constituted, that he was enabled to acquire the knowledge of a language in a surprisingly short space of time, even under great disadvantages.

We will give his own account of the way in which he overcame obstacles arising from want of books.

One of his school-fellows, named Kerr, "told me," he says, "that he had once learned Latin for a fortnight, but had not liked it, and that he

still had the Rudiments by him. 'Do lend me them,' I said; 'I wish to see what the nouns and verbs are like, and whether they resemble our French.' He gave me the book. I examined it for four or five days. I used to repeat a lesson from the French Rudiments every forenoon in school. On the morning of the mid-summer fair I set out for school, and accidentally put into my pocket the Latin Grammar instead of the French Rudiments. On an ordinary day Mr. Cramond would have chid me for this: but on this festive morning he was *mellow*, and in excellent spirits. With great glee he replied, when I told him my mistake, and showed him the rudiments, 'Gad, Sandy, I shall try thee with Latin;' and accordingly read over to me two of the declensions.

"I compared French and Latin, and riveted the words of both in my memory by this practice. When proceeding with the Latin verbs, I often sat in the school-room all mid-day, and pored over the first page of Robert Cooper's (another of his school-mates) Greek Grammar—the only one I had ever seen. By the help of this book I mastered the letters."

Some of the other boys lent him books to continue these studies. His attention was next directed to the Hebrew language, the alphabet of which he became acquainted with in the following manner:—An old woman, who lived near his home, showed him a Psalm Book containing notes. The Hebrew alphabet was also marked, letter after letter, in the 119th Psalm. These he copied off in the same kind of letter;

he then followed up the study from some Hebrew Vocables, contained in an old worn out edition of a valuable work, which he had purchased for a small sum of money. With the view of improving himself in Hebrew, Murray commissioned a man who rode with the post, to purchase a Grammar for him, in Edinburgh. The man brought him the first edition of Robertson's Grammar. This work contained, on the last leaf, the Arabic alphabet; which drew his attention to that language also. Thus Murray went on, alternately becoming learner and teacher, until he was nineteen years of age. He had taken advantage of every opportunity which offered for improvement, especially in the knowledge of languages; and he began to reap the fruit of his industry, for his progress was now comparatively easy.

In November, 1794, Murray went to Edinburgh, under the patronage of the Rev. Dr. Baird, to continue his studies; and in the course of two years he entered the university.

His fame was now established as a linguist: having made himself acquainted with all the European languages, he formed a design of tracing them up to their source. The result of his inquiries into this subject were published after his death, under the title of "History of the European languages; or, Researches into the Affinities of the Teutonic, Greek, Celtic, Slavonic, and Indian Nations."—"By the help of nine words, and their compounds," he says, "all the European languages have been formed."

Alexander Murray subsequently became a minister in the Church of Scotland, and obtained the degree of D.D. He was also elected to the chair of Oriental languages, in the University of Edinburgh. He did not, however, long enjoy these honours. A few months after his election, which took place in July, 1812, he was attacked by a pulmonary complaint, which eventually proved fatal. When obliged to discontinue his public duties, such is the flattering nature of the disease, that he had hopes of resuming them; and he occupied himself in his favourite studies, until within a few days of his death. He died April 15th, 1813, in the thirty-eighth year of his age.

BENJAMIN WEST,

PAINTER.

BENJAMIN WEST was born at Springfield, in America, October 10th, 1738. The Wests were, however, of ancient English descent.—One of their ancestors, Lord Delaware, distinguished himself in the wars of Edward the Third and the Black Prince; another, of later date, Colonel James West, was the friend and companion-in-arms of John Hampden.

In the year 1667, the family of the Wests embraced the tenets of the Society of Friends, and they were amongst the emigrants to the rising settlement of Pennsylvania.

John West, the father of Benjamin, when a youth, remained in England for a short time after his friends had left, for the purpose of completing his education at the Quakers' Seminary, at Uxbridge. He subsequently joined his family in Philadelphia, and united himself to a lady, named Pearson.

There is a degree of interest connected with this lady's family. Her grandfather was the friend of William Penn, and he assisted him in founding the State of Pennsylvania. The bride received, as a part of her marriage portion, a Negro slave, who was much attached to the family ; and for a season the newly-married couple retained him in his bondage, though they treated him with kindness. A circumstance occurred, however, which opened their eyes to the sin of holding a fellow-being in slavery, and they gave him his freedom.

John West, on visiting some other American settlements, witnessed many cruelties practised by masters towards their slaves ; and he then began to see the injustice of trading in human blood. Conscience told him that the principle of slavery is wrong, however mildly it may be acted upon. He did not try to stifle its voice with any plea of expediency, but nobly acted out his convictions by liberating his bondsman ; he kept the man however, in his service, and paid him wages. This was the most expressive mode he could have adopted for making known his opinions, and many of his brethren in the Society of Friends were induced to follow his example. The feeling soon became general in the society ; for the subject was not only discussed in their social gatherings, but also preached publicly, and it met with a generous response. To the honour of the Society of Friends, it may be told, that, to this day, no person can be a member of their community whilst he retains one human being in slavery.

From the account given of the above related circumstance, it appears that John West's ~~christian~~ conduct towards his slave ultimately led to this glorious result.

Benjamin West was the youngest son in a family of ten, and some peculiar circumstances attendant on his birth, led to the somewhat superstitious belief, that he would make an uncommon character. This idea originated with the boy's father, but it was strengthened by a prophetic remark from one of their preachers.

A child sent into the world under such remarkable circumstances," he said, "will assuredly prove a wonderful man." We repeat these prognostics, as they exerted an influence over the future life of the painter. The few first years of Benjamin's childhood passed over, and nothing remarkable was observed to confirm these hopes. One day, however, when the boy was in his seventh year, he was commissioned to watch beside the cradle of a sleeping infant, the daughter of his eldest sister, whilst she and his mother walked in the garden to gather some flowers. Benjamin stood with a fly-flap in his hand, gazing upon his little charge. As he did so, the babe smiled in her sleep, and he was so struck by the sweet expression of her face, that he caught up a piece of paper and drew a likeness of the child in red and black ink. When his mother and sister returned to the room, the young painter made an effort to conceal his picture; but it was observed by his parent, who caught it from his hand, exclaiming, "I declare he has made a likeness of

little Sally !" She folded the boy in her arms, and warmly kissed his cheek, which acted as a fresh stimulus to his newly discovered genius. "That kiss," he said, at an after period of life, "made me a painter ;" he then offered to copy the flowers they had gathered. The sketch of the infant was shown to his father, and the prophecy of his future greatness instantly presented itself to his memory.

About twelve months after, young West became acquainted with a party of Indians, who paid a visit to Springfield. They were shown some of his paintings, for by this time he had made many attempts at copying birds, flowers, and fruits, from nature. Those wild people are not without taste ; and some have skill in the art. They were pleased with the boy's sketches, and they showed him some of their own. They also taught him how to prepare yellow and red paint—colours which they use to stain their weapons. These Indians likewise instructed him in archery. Having obtained paints, the next question naturally arose, —how was he to lay them on ? A neighbour told him that this was done by the aid of a brush, made from the hairs of a camel ; but as neither brushes nor camels were to be obtained at Springfield, what was to be done ? Necessity is the mother of invention, and our young painter lighted on an expedient to supply this want. A favourite black cat was kept in their house ; and Benjamin, in his extremity, had recourse to her tail, to supply his need. The poor animal's altered appearance was noticed,

and it was supposed to arise from disease, until the boy confessed himself to have been the cause. His father was displeased at the injury done to the cat, but he could not forbear smiling at his son's ingenuity. Soon after this, Benjamin received from one of his cousins, what was to him a valuable present—this was a box of paints and pencils, some canvas prepared for use, and six engravings. The boy was so highly delighted on receiving this gift that he could not sleep that night; and having placed the articles by his bed-side the evening before, he arose with the dawn to commence his work.

He carried all his materials up into an attic, that he might remain undisturbed; and he was so enchanted with his occupation, as to neglect even his duties for it. Several days passed, and young West laboured on in secret, when his school-master made inquiries as to the cause of his absence. His mother, who was not aware of his having stopped away, went in quest of him, when to her surprise, she found him in his *studio* before a painting of considerable merit. The fond mother was so pleased with his performance, that she caught the truant artist in her arms, and promised to plead with his father for him. He had not copied his engravings, but had sketched a new scene by a union of two of them; many years after, this early effort was placed in a room with some of his most celebrated paintings, and he then remarked that “there were inventive touches in it, which, with all his subse-

quent knowledge and experience, he had not been able to surpass."

A merchant of the name of Pennington, the same gentleman who had presented West with the box of paints, &c., took his young relative to Philadelphia, and introduced him to a painter of that place. Benjamin was then in his ninth year, and this was the first time that he was introduced to specimens of true art. He was so affected at the sight as to shed tears. The artist encouraged the boy to persevere in the profession of a painter; he lent him books, and invited him to call on him whenever he pleased. From that time, devotion to the art became his ruling passion. West still found difficulty in procuring materials for his work; a carpenter, however, kindly gave him three poplar boards, which he had planed smoothly for the purpose. The young artist made sketches on these boards with ink, chalk, and charcoal, and sold them at a dollar each; and this money, with a small sum which a gentleman in the neighbourhood added to it, supplied him with pencils, &c.

Some of these early efforts attracted the notice of a Mr. Flower, a justice of Chester, who, on hearing something of the youth's history, invited him to make a stay of a few weeks at his house; Benjamin did so, and the visit proved very useful to him. An English lady, who was residing in the family, as governess to the daughters, was skilled in the art of painting; she was, moreover, acquainted with Greek and Latin poets; and she talked to the young artist of the heroes of antiquity. This was a

new and delightful theme to West, for in his enthusiasm for painting, he had neglected every other branch of knowledge. He listened with rapture as she told of Rome, and Greece; of their philosophers, historians, poets, and painters: indeed, he never lost the impression the relations made on his mind; he often recalled them to memory in after life. He painted several portraits at this time, which were much admired; and he also painted his first historical piece, the Death of Socrates.

When Benjamin West returned to his home his parents were anxious to decide on his future career. His mother wished him to be a painter, for she thought the prophecy of his greatness would be fulfilled in that way. His father was not averse to the profession, but he entertained doubts of its being pleasing to the religious society to which they belonged; he resolved, however, to lay the matter before them. A meeting of the Friends was held to determine the question, and much good sense and good feeling was displayed on the occasion: but we will give some little account of it. One John Williamson was the first to speak:—"To John West and Sarah Pearson" he began, "a man-child hath been born, on whom God hath conferred some remarkable gifts of mind; and you have all heard, that by something amounting to inspiration, the youth has been induced to study the art of painting. It is true that our tenets refuse to own the utility of that art to mankind, but it seemeth to me that we have considered the matter too nicely. God has

bestowed on this youth a genius for art, shall we question His wisdom? Can we believe that He gives such rare gifts but for a wise and a good purpose? I see the Divine hand in this; we shall do well to sanction the art, and encourage this youth." A general assent followed, and West was called into the assembly. He took his station in the centre of the room, his father standing at his right hand, and his mother on the left. One of the women next rose to speak, but we are not favoured with an account of what she said. John Williamson afterwards addressed the meeting as follows:—"Painting," he said, "has been hitherto employed to embellish life, to preserve voluptuous images, and add to the sensual gratifications of man. For this we classed it among vain and merely ornamental things, and excluded it from amongst us. But this is not the principle, but the mis-employment of painting. In wise and in pure hands it rises in the scale of moral excellence, and displays a loftiness of sentiment, and a devout dignity, worthy of the contemplation of Christians. I think genius is given by God for some high purpose. What the purpose is, let us not enquire—it will be manifest in His own good time and way."

"He hath, in this remote wilderness, endowed with the rich gifts of a superior spirit, this youth, who has now our consent to cultivate his talent for art—may it be demonstrated in his life and works that the gifts of God have not been bestowed in vain, nor the motives of the beneficent inspiration, which induces us to

suspend the strict operation of our tenets, prove barren of religious or moral effect."

At the close of this address the women came forward and kissed the lad, and the men one by one laid their hands upon his head, to implore a blessing upon him. This solemn dedication to his profession made a powerful impression on the mind of the young artist. The fact of being released from the strict tenets of the religious society among which he had been brought up, he justly felt rendered it more binding upon him not to discredit their community. He said that he regarded it as a covenant on his part to employ his powers on subjects holy and pure. Would that every young man entered on the business or profession which is to occupy him through life with like holy purposes and prayer.

West lost his excellent mother a short time after, and home to him was then deprived of its chief attraction; he therefore left Springfield, and set up as a portrait painter, at the house of his brother-in-law, Mr. Clarkson, in Philadelphia. His love for his mother was strong; he delighted to honour her memory, and when far advanced in years, he would talk of her with emotion, and recall even her looks with pleasing sadness.

His youth (for he was then only eighteen) and his genius, soon brought him many sitters. His prices were two guineas and a half for a head, and five guineas for a half-length figure. He laboured hard, and continued to lay aside a little at a time from his earnings, with the

hope of being able at some future time to improve himself by travel and study. A visit to Rome, that he might behold some of the master-pieces of art, was the object of his desire.

After devoting the day to the easel, he spent his evening with a friend (Dr. Smith, Provost of the College of Philadelphia) who instructed him in the classics. From Philadelphia, West removed to New York, and increased skill enabled him to double his prices. Whilst at this place he met with a Flemish picture representing a hermit praying before a lamp, and as a companion to it he proposed painting a man reading by candlelight. At first he was perplexed to discover how he could catch the effect, as his picture must be made by daylight. He succeeded at last by getting his landlord to sit in a dark closet, with a candle and book before him, whilst he worked in an adjoining room. The plan had the desired effect. After a stay of eleven months in New York, West heard of a vessel which was about to sail with wheat from Philadelphia to Leghorn, in consequence of a failure that year of the crops in Italy. This he thought a favourable opportunity for his long wished for visit, and he wrote to propose the plan to his friends. They had previously thought of it, and Dr. Smith urged his immediate return to Philadelphia, as he was then making the necessary arrangements for his voyage. At the time when his friend's letter arrived, West was painting a portrait of a Mr. Kelly, a merchant of New York. The young

man told that gentleman of his intended journey, and spoke of the benefit he hoped to derive from a short stay in Rome. When the portrait was finished, Kelly paid down the ten guineas agreed upon, at the same time giving the artist a letter to his agents in Philadelphia, and saying that they might possibly assist him with information regarding the outfit necessary. At parting he shook the young man heartily by the hand, and wished him a safe voyage. When West presented his letter to the agents, he found, to his surprise, that it was an order for the payment of fifty guineas, as a present to aid his equipment for Italy; and a very seasonable present it was, in the low state of his purse.

The young painter reached Leghorn in safety; he met with a cordial reception from Messrs. Jackson and Rutherford, merchants of that city, to whom his friend, Mr. Allan of Philadelphia, the owner of the cargo with which he had sailed, had given him letters of introduction. These gentlemen gave him other letters to several of the principal persons in Rome; and he lost no time in journeying thither. He entered the grand seat of the fine arts on the 10th of July, 1760, under the escort of a French courier, who was obliged to act the part of interpreter, as West was totally unacquainted with the language of any country save his own. It was soon noised abroad that a young American painter had come to study the works of Raphael, Michael Angelo, and other masters in the art, and the report excited considerable curiosity. The literati in this learned city were

not much acquainted with the denizens of the "New World," and they were eager to see an inhabitant of the western wilds.

Mr. Robinson, afterwards Lord Grantham, was the first to seek him out. He took him to an evening party, at which most of the persons to whom his letters were addressed, were assembled. The company eyed the artist narrowly, but saw that in general appearance he was like themselves. One gentleman present, Cardinal Albani, was much advanced in years, and had lost his sight.

"I have the honour," said Mr. Robinson, addressing him, "to present a young American, who has a letter for your Eminence, and who has come to Italy for the purpose of studying the fine arts."

"Is he black or white?" asked the Cardinal, and he held out both his hands, and passed them over the young man's head, observing that it was well formed.

"He is fair, very fair," Mr. Robinson replied, smiling at the idea of the youth being supposed to be a savage.

"What! as fair as I am?" the prelate exclaimed. This was regarded as a good joke, for Albani's complexion was a deep olive, and West was unusually fair; and "as fair as the Cardinal" became a common saying.

"Thirty of the most magnificent equipages in the capital, filled with some of the most erudite characters in Europe," says his biographer, Galt, "conducted the young Quaker to view the master-pieces of art." We fear this

was done more from curiosity than from kindness, for many wished to witness the effect which the sight would have on the stranger. The statue of Apollo was first presented to his view, and a man was directed to throw open the door of the case in which it stood, so as to take him by surprise.

"A young Mohawk warrior!" exclaimed the painter, eyeing it with admiration. The Italians were not very well pleased with the comparison; and West, observing their chagrin, described the Mohawks. He spoke of the manly beauty of their form, and the simple grace of their movements, arising from the elasticity of their limbs.

"I have often seen them," he added, "standing in the very attitude of this Apollo, and pursuing with an intense eye the arrow they had just discharged from the bow." This explanation gave a happy turn to affairs; the criticism was acknowledged to be a good one, and the young American was no longer regarded as a semi-barbarian.

West was anxious to perform something which would justly entitle him to mix among men of genius. He was not satisfied with being regarded with wonder, because he chanced to be the first of his countrymen and of his sect who had visited Rome out of love to the fine arts; he wished to prove his claims to genius. He consulted his patron, Mr. Robinson, on the subject. "I cannot," he said, "produce a finished sketch, like the other students, because I have never been instructed in drawing;

but I can paint a little; and if you will do me the honour to sit for your portrait, that I may shew it to Mengs, you will do me a great kindness." The celebrated Mengs was at that time engaged on a portrait of Mr. Robinson; but that gentleman wished to encourage the young quaker, and he cheerfully consented to his request. When the portrait was finished, Mr. Robinson had it produced before a large party of his friends, but kept back the name of the artist, until he should know how it was received. Some supposed it to be the work of Mengs; others, on examination, said that the colours were finer than any produced by that artist, but that the drawing was not equal to his. West, who was present, sat upon a sofa, apart from those who were thus discussing the merits of his performance, listening with eagerness to his friend, Mr. Robinson, as he interpreted their remarks.

"It is not painted by Mengs," said the gentleman who was exhibiting the picture.

"By whom, then?" was the general inquiry.

"By that young gentleman," was the reply; and the speaker turned to West.

This was a moment of triumph to the self-taught young artist. The English who were present held out their hands to him, and the Italians, in the ardour of their admiration, embraced him.

Mengs himself joined the company soon after, and the portrait was shewn to him. He commended its merits, and generously strove to encourage the artist. "Young man," he said,

“you have no occasion to come to Rome to learn to paint : what I therefore recommend to you is this :—examine everything here worthy of attention—making drawings of some half dozen of the best statues. Go to Florence, and study in the galleries ; go to Bologna, and study the works of art. Then proceed to Venice, and view the productions of Tintoretto, Titian, and Paul Veronese. When all this is accomplished, return to Rome, paint an historical picture, exhibit it publicly, and then the opinion which will be expressed of your talents will determine the line of art which you ought to follow.”

West had then been rather more than a month in Rome. The excitement consequent on beholding the beautiful in art, together with the fear of giving an unfavourable impression of his abilities by his first public attempt, had deprived him of sleep ; and the result was, that he was attacked by fever. When he was able to be removed, his physicians insisted on his being taken back to Leghorn, where he lingered for some considerable time. He subsequently went to Florence ; but it was that he might consult an eminent surgeon of that city. This illness continued for eleven months ; but he did not neglect his profession all that time. He had a table so constructed, that he could draw and paint as he lay in bed, and he had his brush in his hand whenever his strength would at all permit.

The God, whose blessing had been implored by the simple band of Christians, on his entering

on his profession, answered those prayers. He raised him up friends, now that he was a stranger in a strange land. He placed him among those who were kind in his season of sickness; and when his purse was nearly exhausted, and he was disabled by weakness from replenishing it, a fresh opening in Providence appeared. When the young man went to the Florence Bank, to draw his last ten pounds, he was told by the bankers, that Mr. Allen, of Philadelphia, had commissioned them to give him credit to any amount. The story of the portrait had been made known to the American merchant, through the medium of his agents at Leghorn; and pleased with the success of his protégé, whom he regarded as an honour to his country, he declared that he would provide him with what money he might require in prosecuting his studies.

Governor Hamilton, to whom Allen communicated his intention, begged to share in this act, saying, "You must not have all the honour to yourself; allow me to unite with you in the responsibility of the credit."

With renewed strength, replenished purse, and hopeful spirits, West now followed the advice of Mengs. He visited Florence, Bologna, and Venice; he then returned to Rome, and executed two historical paintings. The favourable reception these pictures met with decided the course to which his genius was in future directed. His thoughts were now turned towards the land of his birth; and he was preparing for a return to America, when a let-

ter from his father, recommending that he should first go *home* for a short time, altered his purpose. *Home* was a significant term, which the settlers on the western continent used for England. Though self-exiled, their hearts yearned with affection towards the land of their fathers. West was quite agreeable to his father's proposal, but he had then no idea of making England his future home; he felt strongly attached to America. He made a short stay at Parma, where he had the honour of being elected a member of the academy, as he had previously been of the academies at Florence and Bologna. He was also introduced to the Court, at the express desire of the reigning prince. West appeared in the royal presence with his hat on, much to the consternation of the courtiers; but the prince was aware of the peculiarities of the sect to which he belonged; he respected the character of William Penn; he admired the genius of the young man before him, therefore, overlooking this want of outward homage, he received the artist with marked tokens of regard. West had the gratification of meeting three attached friends, Smith, Allen, and Hamilton, in London; and they gave him a hearty welcome, and introduced him to other friends, and to several men of talent. He visited Hampton Court, Windsor, and Blenheim; and, by degrees, began to love the mother country. West took a lodging in Bedford-street, Covent-garden, and recommenced his professional duties. Having finished a picture, he placed it in

the Exhibition of Art, then held in Spring-gardens. His works were well received, and an offer was subsequently made him by Lord Rockingham, of a permanent engagement, at a salary of £700 a year, to make historical paintings to adorn that nobleman's country seat. West declined this offer, by the advice of his friends, who thought that he had better confide in the patronage of the public.

Prudence now said most unequivocally—Stay in England; but another voice whispered in his ear—Go back to America. It was the voice of affection. A young lady, residing in Philadelphia, had long been the object of the painter's regard; and though his position and prospects had much improved, so that he might have wooed and won a richer, and perhaps fairer bride, yet his attachment remained unaltered. West told the state of his feelings to his friends, Allen and Smith, and proposed going back to America to be married, and then returning and taking up his residence in London. These gentlemen did not quite approve of the plan; they advised him to go on with his work, and leave the matter in their hands. They proposed that the lady should be brought over to England by a relative, which would save the artist's time. This was done, and they were married in the church of St. Martin's-in-the Fields, September 2nd, 1765.

Dr. Drummond, Archbishop of York, introduced West to George III., who received him with affability, and immediately gave him an order for an historical picture—the departure of

Regulus from Rome. He was afterwards chiefly engaged on paintings for the king, and for nearly forty years he retained his sovereign's confidence and regard. He executed eight historical pictures for St. George's-Hall, Windsor Castle. Also twenty-eight, out of thirty-six, on religious subjects designed for the royal chapel. The idea of these pictures originated with West.—He suggested to his royal patron a series of paintings, illustrative of the progress of revealed religion, and projected an Oratory for their reception. The king was pleased with the proposal, but he felt it right to consult some of the clergy, ere he closed with it. Six dignitaries of the Church were therefore summoned, to give their opinion on the propriety of the step.

"When I reflect," said the king, "that the Reformation condemned religious paintings in churches, and that the Parliament, in the unhappy days of Charles I., did the same, I am fearful of introducing anything which my people might think Popish. Will you give me your opinion on the subject? After deliberation, Bishop Hurd expressed an opinion, in which the other reverend gentlemen concurred, in favour of the plan. They thought that religious paintings, being introduced into the king's private chapel, could not, in any way, violate either the laws, or the usages of the Church of England. "We have examined, too," the prelate continued, "thirty-five subjects, which the painter proposes for our choice; and we feel that there is not one of them but may be

treated in a way that even a Quaker might contemplate with edification." His majesty felt irritated by this remark; he thought that it was an ungenerous allusion to West's religious opinions. "The Quakers," he returned, "are a body of Christians, for whom I have a high respect. I love their peaceful tenets and benevolence to one another, and but for the obligations of birth I would be a Quaker." The Bishop said no more, but bowed and retired.

West divided his subject into four dispensations. The Antediluvian, the Patriarchal, the Mosaical, and the Prophetical. Eighteen were illustrative of the Old Testament, the others were drawn from the New Testament. He devoted much thought and study to these sketches. He felt the sublimity of the subjects, and the necessity of adhering to truth in his representations; lest, whilst trying to advance the cause of religion by the efforts of his pencil, he should injure it. West was a great stickler for truth in all his paintings; he would not sacrifice truth to effect. He acted from principle, but he also showed correct taste, by so doing. When painting his celebrated picture, "The Death of Wolfe," he told his friends, that he intended to draw the figures in the costume of the time. This was a bold step to take, for historical characters had hitherto been represented in fanciful dresses to suit the taste of the artist; the introduction of boots, and buttons, and cocked hats, at that time appeared barbarous in a work of art. The self-taught American, who had studied art from

nature's self, was not to be governed by any laws of precedency. Because others had not done so, was not enough for him; he dared to act on the decision of his judgment, and the event proved that he was right.

"When it was understood," says West, "that I intended to paint the characters as they had actually appeared on the scene, the Archbishop of York called on Reynolds, and asked his opinion; they both came to my house to dissuade me from running so great a risk. Reynolds began a very ingenious and elegant dissertation on the state of the public taste in this country, and the danger which every innovation incurred of contempt and ridicule; and concluded by urging me to adopt the costume of antiquity, as more becoming the greatness of my subject than the modern garb of European warriors. I answered that the event to be commemorated happened in the year 1758, in a region of the world unknown to the Greeks and Romans, and at a period of time when no warriors who wore such costume existed. The subject I have to represent is a great battle fought and won, and the same truth which gives law to the historian, should rule the painter. If, instead of the facts of the action I introduce fiction, how shall I be understood by posterity? The classic dress is certainly picturesque, but by using it, I shall lose in sentiment what I gain in external grace. I want to mark the place, the time, and the people, and to do this, I must abide by truth." They went away then, and

returned again when I had finished the painting. Reynolds seated himself before the picture, examined it with deep and minute attention for half an hour; then rising, said to Drummond, 'West has conquered—he has treated his subject as it ought to be treated'—I retract my objections.—I foresee that this picture will not only become one of the most popular, but will occasion a revolution in art.' 'I wish,' said the king, 'that I had known all this before, for the objection has been the means of Lord Grosvenor's getting the picture, but you shall make a copy for me.'"

On the death of Sir Joshua Reynolds, West was elected to the President's chair of the Royal Academy. He delivered his inaugural address on the 24th of March, 1792. The King wished to honour the new president by knighthood; but as he still belonged to the Society of Friends, he had some doubts as to whether such a distinction would be acceptable. The Duke of Gloucester was, therefore, commissioned to call on West, and ask the question. He politely declined the honour.

West had for more than thirty years received his orders from the King in person; but one day, a messenger from the Court called on him, saying that he was authorized to inform him, that the execution of the pictures for the chapel at Windsor must be suspended till further orders. The painter could not account for this change; conscious, however, that he had not merited a withdrawal of his Royal Patron's regard, he wrote to the King, requesting an explanation;

but he received no answer. He afterwards learned that this proceeding was owing to the King's illness, and that he knew nothing of the matter, and had never seen his letter. On His Majesty's recovery he obtained an interview ; " Go on with your work, West," said the King, taking the painter by the hand, " go on with the pictures, and I will take care of you." This was their last meeting, for the King had a second seizure soon after. West went on with his paintings, however, and for a time received his usual payments (£1000 a year, on account), but these sums were at length stopped, without any previous warning. On going to receive his quarterly payment he was told that the money was not to be paid any longer. West felt hurt at this ungenerous treatment, but he did not either remonstrate or complain.

When the painter's dismissal from the Court was known, some who had been envious of his success tried to injure him in the opinion of the public. It was stated that West had received the sum of thirty-four thousand one hundred and eighty-seven pounds ; but it was not told that this money was in payment for thirty-three years hard labour. Though now somewhat advanced in life, the painter's strength and intellect remained unimpaired ; the consequence, doubtless, of his regular and temperate habits. He now turned his attention to Scriptural subjects, upon a large scale ; looking for support to the good taste of the public. Perhaps he would have found it more profitable to have done so from the first, instead of relying

upon royal patronage; but, as it was he realized a competency with but little risk and anxiety. A special interest is connected with West's painting of "Christ healing the Sick," which was executed at this time. The Society of Friends, in Philadelphia, asked him to assist them in erecting an hospital for the sick, in his native place. He replied that he could not afford to be very generous with money, but he offered to paint them a picture, if they could give it a place in their building; and the above mentioned subject was chosen as the most appropriate. When the picture was finished it was exhibited in London, and crowds flocked to see it. It was so highly esteemed that the British Institution offered three thousand guineas for it; and as the painter was then far from rich, he accepted the offer, on condition that he should be allowed to make a copy of it, for the charitable purpose for which it had been painted. This was granted. The copy, which was sent to America, was exhibited there; and the money raised in that way, enabled the committee to enlarge the hospital, and receive more patients.

West was so regular in his habits, that to describe the manner in which he spent one day might almost be said to describe years. He was an early riser, and he studied his subjects till breakfast. At ten he went to his easel, and worked hard until four. He then washed and dressed for dinner, and received visitors. The evening was spent like the morning, in the study of subjects for his pencil. He con-

fixed himself so closely within doors, that it was a matter of surprise to see him abroad. He always retained the simplicity of his manners; and his intercourse with kings and courtiers did not induce him to lay aside the sedateness of the Quaker. His words were few, but they were expressive of cheerfulness and kindness. His temper was even, he bore the annoyances of interruption with good humour; and, when an instructor of youth, he treated the dull with patience. He was kind to all, but particularly to young artists; whom he assisted in their profession; and his purse was so frequently opened to relieve the needy as to seriously diminish his own funds. He always rejoiced when he saw any advance in art, and he was too liberal-minded to be jealous of any good fortune in others. He had a very favourable opinion of his own abilities, but it was displayed in a harmless manner, and it is probable that it induced him to undertake that which a more self-distrusting nature dared not have attempted. His moral character was irreproachable; he was an amiable and upright man. It was a pity that West did not in his youth apply himself more to the acquisition of general knowledge. In the pursuit of his art he neglected the usual branches of education, and consequently through life he remained a somewhat illiterate man. His industry we need not speak of; the number of his paintings give evidence of his perseverance in labour. His pictures in oil amounted to more than four hundred, and many of them

are of an extraordinary size. In his religious paintings his main object was to impress Gospel truths on the mind. Many of the subjects he chose for his pencil were the most solemn and sublime that human thought can reach ; but he felt his subject, and treated it with devout reverence.

In December, 1817, West was deprived by death of his beloved partner. She had been his kind and sympathising companion for more than fifty years. He had children and grandchildren ; but from the time of his wife's death, his health gradually sunk, and he suffered a slow and easy decay. He was still, however, to be seen at his easel, though he had lost the vivacity of former days. But his cheerfulness remained,—for it was the cheerfulness of piety, which age can never destroy. He died March 11th, 1820, in the eighty-second year of his age.

West was buried beside Sir Joshua Reynolds, in St. Paul's Cathedral. The pall was carried by noblemen, ambassadors, and members of the academy. His two sons, with their sons, were chief mourners ; and no less than sixty coaches brought up the solemn procession.*

* We are chiefly indebted for the information contained in this sketch, to Allan Cunningham's "Lives of British Painters," &c.

JAMES BRINDLEY,**ENGINEER.**

THE father of James Brindley was the owner of a small freehold estate at Tunstead, in Derbyshire; but being fond of field-sports, and given to drunkenness, his wife and children were reduced to extreme poverty. So utterly neglectful was this man of his duties as a parent, that the subject of this sketch had not the ordinary advantages of the children of the poor. When quite a child he was obliged to assist in the support of the family, by pursuing different kinds of out-door labour; but when he became seventeen years of age, having lost his father, he gave up this drudgery, and apprenticed himself to a millwright of the name of Bennet, who resided at Macclesfield, in Cheshire,—an early taste for mechanics, doubtless, leading him to make choice of that profession.

The youth was too poor to pay a premium;

but his extraordinary talents were of more value to his master than any premium would have been. Very early in his apprenticeship he became so expert at his business, that he was frequently left for weeks together to execute work without any instructions from his master. Brindley did more than imitate what others had done;—he was constantly introducing improvements into the mill-work,—which so excited the wonder of Mr. Bennet, that he was led to inquire where his apprentice could have gained his knowledge. Brindley's reputation as a mill-wright was ere long so great, that the millers in the neighbourhood always chose him in preference to his master, or any other workman.

Many young men would have presumed upon this distinction, and shewn arrogance and pride; but Brindley's good sense and good principles were equal to his talent,—and so far from behaving in an unbecoming manner to his master, he evinced the deepest possible interest in his concerns.

A striking instance of Brindley's devotion to Mr. Bennet's service, is shewn in the following anecdote.

Bennet engaged to construct an engine paper-mill, and in order to obtain an insight into the machinery, he took a journey to a distant place, to see a mill of the kind at work. He came back, it seems, but little benefited by the sight, for when he set his men to work, they could not accomplish the task. A mill-wright who happened to be travelling that way

at the time, visited Mr. Bennet's works; and having done so, scrupled not to declare publicly, that the mill-owner would certainly throw his money away, for Mr. Bennet's attempt would prove a failure. This report reached young Brindley's ears, and having himself misgivings as to the issue, he determined on getting a sight of the model, and by these means saving his master's credit.— With this view he one evening, after his day's labour was done, set out on foot for the place, without, however, making known his purpose to any one. He reached the spot, gained a sight of the machinery the next day, and returned home the following morning, in time to commence his work at the usual hour, having walked fifty miles. The result was, that the machinery was completed to the entire satisfaction of the mill-owner; and not only so, but Brindley made a considerable improvement in the press used for pressing the paper.

Before the term of Brindley's apprenticeship had expired, his master, who was much advanced in years, became too infirm to take any part in the business. Here again the young man's conduct showed itself in a most amiable point of view. He carried on the works by himself, which supported the old man and his family in comfort.

After having served Mr. Bennet with fidelity and diligence, both as an apprentice and workman, for several years, Brindley set up in business for himself. He commenced as a millwright; but his skill being highly esteemed,

his assistance was sought in various branches of machinery beside mill-work, and he afterwards turned his attention to engineering in general.

In the year 1755, some gentlemen residing in London employed him to execute the larger wheels of a silk-mill, at Congleton, in Cheshire. The smaller wheels of this mill, and the complex movement, were confided to another person, who was to superintend the whole. Shortly after, however, this person was obliged to acknowledge that he was not capable of carrying out what he had undertaken, though he at the same time treated Brindley with marked disrespect. In alarm for the result, the proprietors now turned to Brindley for aid, but they had the folly to still leave the management of the concern in the hands of the man who had confessed himself incompetent. Under these circumstances, Brindley, who had a proper consciousness of his own abilities, refused to act unless he were permitted to conduct the whole in his own way, which he was ultimately allowed to do. The result was, that he not only completed what he had engaged in, but introduced many valuable improvements, which tended to simplify the machinery, and save manual labour.

Brindley's fame at length reached the ears of an individual whose name stands high amongst the patrons and benefactors of science. This was Francis, Duke of Bridgewater. The Duke was the owner of an estate at Worsley, a place about seven miles from Manchester, under the soil of which were immense mines of coal. From

these mines, however, no profit was derived, because the carriage of the coal by land was so heavy that it was not worth while to take it into the market. An Act of Parliament had been procured by the Duke's father, allowing him to cut a canal from Worsley to Manchester; but the difficulties in the way were found to be numerous, and the outlay required so great, that the former Duke had been deterred from carrying out the design.

The plan was proposed to Brindley, who entered warmly into it, and immediately commenced surveying the ground for the undertaking. The difficulties he allowed were great, but not insurmountable. His plan was to cut the canal on an uniform level throughout. It was therefore necessary that it should be carried through hills; and over the river Irwell, by means of an aqueduct, at an elevation of nearly fifty feet. The idea of an aqueduct over the Irwell appeared to many so wild and extravagant a scheme, that Brindley requested the Duke to take the opinion of another engineer. A gentleman of some eminence in the profession was accordingly called in, and he was taken to the spot where it was proposed that the aqueduct should be made, in order that he might pass his judgment upon its practicability. His remark was this,—“I have often heard of castles in the air, but never before was shown where any of them were to be erected.”

The Duke, however, had the good sense to disregard this sneering witticism, and to trust to the well-tried worth and genius of Brindley.

A fresh Act of Parliament was accordingly obtained, the work was commenced, and found to answer the most sanguine expectations of the projector.

This canal became one of the greatest wonders of the time. The following extract is from a letter noticing it, which appeared in one of the newspapers.

"Gentlemen come to see our eighth wonder of the world—the subterranean navigation which is cutting by the great Mr. Brindley, who handles rocks as easily as you would plum-pies, and makes the four elements subservient to his will. He is as plain a looking man as one of the boors of the Peak, or one of his own carters; but when he speaks all ears listen, and every mind is filled with wonder at the things he pronounces to be practicable. He has cut a mile through bogs, which he binds up, embanking them with stones, which he gets out of other parts of the navigation; besides about a quarter of a mile into the hill of Yelden, on the other side of which he has a pump, which is worked by water, and a stove, the fire of which sucks through a pipe the damp, which would annoy the men who are cutting towards the centre of the hill. The clay he cuts out serves for bricks, to arch the subterraneous parts, which we heartily wish to see finished to Willden Ferry, when we shall be able to send coals and pots to London, and to different parts of the globe."

The great Bridgewater Canal was but the beginning of similar works, which in time had

the effect of entirely changing and greatly increasing the internal commerce of England. In the present era of railroads and navigable canals, we can scarcely realise an idea of the state of the country when such things were not in general use.* This canal fixed the fame of Brindley, and his services were sought from all quarters. The Duke of Bridgewater immediately determined upon continuing his canal, to the tideway of the river Mersey at Runcorn, so as to connect Liverpool and Manchester by water more advantageously, than they were then connected by means of the Irwell, the navigation of which river, from various causes being frequently uncertain.

This was a greater undertaking than the former, for the length of the canal was thirty miles, and there were two rivers to be crossed by aqueducts, and several deep valleys by broad and high embankments. The work was, however, completed in five years. His next undertaking was a canal to which he gave the name of the Grand Trunk, because he expected that many branches would be extended from it, which proved to be the case. This canal connects the ports of Hull and Liverpool. It is ninety-three miles in length, and has seven-

* Previous to the formation of the Bridgewater canal, there had been a canal cut in Lancashire. An act of parliament was obtained for rendering the Sankey brook navigable, which brook flowed from the neighbourhood of the present town of St. Helens into the river Mersey. When the ground was surveyed, however, it was thought better to dig a canal instead of making alterations in the stream, and the scheme proved profitable to the projectors.

ty-six locks, three aqueducts, and five tunnels, one of which is more than a mile and a half in length.

It would be uninteresting to the general reader to go through the various works of the kind Brindley projected. His thoughts and energies were continually directed to that one object: indeed, it is to be regretted, that he did not allow himself to relax occasionally, and devote his attention to other important subjects, for he was so uneducated that he was scarcely able to read or write. His enthusiasm in his profession however, cannot but be admired and commended, for it appears to have been wholly disinterested.

When under examination before a Committee of the House of Commons, Brindley spoke so slightly of rivers, that one of the members asked him for what purpose he supposed them to have been created. The engineer paused for a moment, and then jocosely replied, "To serve as feeders for navigable canals."

Brindley formed his plans, and carried out his calculations, in a singular manner. "When any extraordinary difficulty," says his friend, Mr. Bentley, "occurred to Mr. Brindley in the execution of his works; having little or no assistance from books or the labours of other men, his resources lay within himself. In order therefore to be quiet and uninterrupted, whilst he was in search of the necessary expedients, he generally retired to his bed; and he has been known to lie there one, two, or three

days, till he had attained the object in view. He would then get up and execute his design without any drawing or model. Indeed, it was not his custom to make either, unless he was obliged to do it to satisfy his employers.—

“His memory was so remarkable,” adds that gentleman, “that he has often declared he could remember and execute all the parts of the most complex machine, provided he had time, in his survey of it, to settle in his mind the several departments, and their relation to each other. His method of calculating the powers of any machine, invented by him, was peculiar to himself. He worked the question some time in his head, and then set down the result in figures. After this, taking it up again in that stage, he worked it further in his mind for a time, and set down the result as before. In the same way he still proceeded, making use of figures only at stated periods of the question. Yet the ultimate result was generally true, though the road he travelled in search of it was unknown to all but himself, and perhaps it would not have been in his power to have shewn it to another.

Brindley's mind was prematurely worn out. He died September 27, 1772, at Tarnhurst, in Staffordshire, in the fifty-sixth year of his age.

“The Public,” says the above-quoted writer, “could only recognise the merit of this extraordinary man in the stupendous undertakings he carried to perfection, and exhibited to public view. But those who had the advantage of conversing with him familiarly, and of knowing

him well in his private character, respected him still more for the uniform and unshaken integrity of his conduct ; for his steady attachment to the interest of the community ; for the vast compass of his understanding, which seemed to have a natural affinity with all grand objects ; and likewise for many noble and beneficent designs, constantly generating in his mind, and which the multiplicity of his engagements, and the shortness of his life, prevented him from bringing to maturity."

We conclude this brief notice of a man who deservedly ranks among the benefactors of his country, with the following highly poetic description of his labours from the poet Darwin.

"As now on grass, with glossy folds reveal'd,
Glides the bright serpent, now in flowers conceal'd,
Far shine the scales that gild his sinuous back,
And lucid undulations mark his track ;
So with strong arm immortal Brindley leads
His long canals, and parts the velvet meads ;
Winding in lucid lines, the watery mass,
Mines the firm rock, or loads the deep morass—
With rising locks a thousand hills alarms,
Flings o'er a thousand streams its silver arms,
Feeds the long vale, the nodding woodland laves,
And Plenty, Arts, and Commerce, freight the waves."

JAMES FERGUSON,

PROFESSOR OF ASTRONOMY AND MECHANICS.

WHEN bringing forward examples of self-educated men—men who have overcome obstacles arising from poverty, or other circumstances equally disadvantageous to mental culture—we may instance James Ferguson. He was born in the year 1710, near the village of Keith, in Banffshire. His father was a day-labourer, and an upright and pious man; but being too poor to send his children to school, he himself taught them to read and write to the best of his ability. It is a pleasing feature in the Scottish character, that they make a great effort to inform the minds of their children; and this trait alone entitles them to respect.

The elder Ferguson taught his children in succession, as he judged they arrived at a suitable age to receive instruction. But James was so anxious to learn that he could not wait patiently for his turn to come; he used, there-

fore, to listen whilst an elder brother received his lesson; and as soon as it was finished, he carried off the books to some place where he could repeat what he had heard without being noticed. He was ashamed to tell his father of these really praiseworthy efforts; and when any difficulty arose which he could not overcome, he applied to an old woman, who lived near their cottage, and she gave him all the assistance she was able. By these means he could read tolerably well before any of his family were aware that he knew his letters; and his father was not a little surprised when he chanced one day to overhear him reading to himself.

When James was about seven years of age, a circumstance occurred which first drew his mind towards the study of mechanics; a pursuit in which he afterwards displayed great skill. The roof of their cottage partly fell in, and to remedy this evil, his father used a beam, which he rested on a prop in the manner of a lever, and the contrivance had the desired effect. Simple as this effort was, it awakened the boy's curiosity. He wished to ascertain the principles involved in the lever, and he gave much thought to the subject:—he made models on which he could work out his ideas; he drew diagrams, and at length came to pretty just conclusions on the matter. Not content with discovering the simple application of the mechanical power he had thus become acquainted with, he desired to test it still further:—"I then," he says, "thought

that it was a great pity that, by means of this bar, a weight could be raised but a very little way. On this, I soon imagined that, by pulling round a wheel, the weight might be raised to any height, by tying a rope to the weight, and winding the rope round the axle of the wheel ; and that the power gained must be just as great as the wheel was broader than the axle was thick, and found it to be exactly so, by hanging one weight to a rope put round the wheel, and another to the rope that coiled round the axle."

The boy had thus, by patient thought (for he had neither books nor teacher), come to the knowledge of two of the elementary truths in mechanics. Thinking to benefit the world by his discovery, he wrote a little book on the subject ; giving diagrams of the various parts, which he drew with a pen. Much to his surprise, he was shown a printed book, containing the same truths ; he was pleased, however, to find that his hypothesis was correct.

James Ferguson for a time followed the calling of a shepherd, though his constitution was ill-fitted for such an employment. Whilst watching his flocks, he was wont to employ himself in making models for machinery, and at night he studied the stars. One farmer, named James Glashan, in whose service he remained some time, took a very generous interest in his philosophical pursuits. He gave him all the time he could possibly spare, "and he often," Ferguson says, "took the thrashing flail out of my hands and worked himself, while I sat by him in the barn, busy

with my compasses, ruler, and pen. I shall always have a respect for the memory of that man," he adds.

After the young man had finished his day's work, he frequently walked into a neighbouring field, where he lighted a candle; then wrapping himself up in a blanket, he stretched himself on his back to study the heavenly bodies. "I used," he says, "to stretch a thread with small beads on it, at arms length, between my eye and the stars; sliding the beads upon it till they hid such and such stars from my eye, in order to take their apparent distance from one another; and then, laying the thread down on a paper, I marked the stars thereon by the beads." On one occasion, Ferguson was sent with a message from his master to Mr. Gilchrist, the minister of Keith; when he took some of his drawings with him, and embraced that opportunity of showing them. That gentleman was so pleased with the specimens he brought, that he gave the young man materials to work with, such as a pair of compasses, a ruler, pens, and paper. He also lent him a map of the earth, which he desired him to make a copy of, and show to him.

When the map was finished, Ferguson took it to Mr. Gilchrist, and he was then introduced by his new friend to a Mr. Grant, a gentleman of property, who was on a visit at his house.

Mr. G—— offered to take the young man into his house, that he might have the advantage of receiving instruction from his butler, who was an intelligent and well-informed man. Fer-

guson declined the offer for the present, on account of his engagement with the worthy farmer; he would not even allow another person to be sent to fill his place, which Squire Grant kindly proposed. When, however, the term agreed upon had expired, he gladly availed himself of the offer. He was then in his twentieth year. He found a good friend, and an able instructor, in Cantley the butler; though he was wholly self-taught. He understood the Latin, Greek, and French languages; he was learned in mathematics; he could play on a variety of musical instruments; he could open a vein, and prescribe for all common cases of disease.

Ferguson studied the higher branches of arithmetic and algebra under his new teacher, and he was about to commence geometry, when Cantley changed his situation at Squire Grant's, for an office under the Earl of Fife. At parting, the butler gave his pupil a copy of "Gordon's Geographical Grammar," which proved very useful to him.

The young man now returned home, and made the best of the information he had gained. The above-mentioned book contained a description of a terrestrial globe. "From this description," says Ferguson, "I made a globe, having turned the ball thereof out of a piece of wood; which ball I covered with paper, and delineated a map of the world upon it. I made the meridian ring and horizon of wood, covered them with paper, and graduated them, and I

was happy to find that by my globe (which was the first I ever saw) I could solve problems."

He subsequently made a pair of globes for Sir James Dunbar of Durn, of very ingenious construction. He painted two round stones, which had formerly stood upon a gateway on that gentleman's grounds, one with a map of the earth, and the other of the stars.

"The poles of the painted globes stood towards the poles of the heavens," he says; "on each the twenty-four hours were placed around the equinoctial, so as to show the time of the day when the sun shone out, by the boundary where the *half* of the globe at any time enlightened by the sun was parted from the other half in the shade; the enlightened parts of the terrestrial globe answering to the like enlightened parts of the earth at all times; so that, whenever the sun shone on the globe, one might see to what places the sun was then rising, to what places it was setting, and all the places where it was then day or night throughout the earth."

Ferguson soon after entered the service of a miller, who lived near his home. This man spent a considerable portion of his time at an ale-house, leaving the young man to do all the work, and moreover, without a sufficient supply of food. After a stay of twelve months in this situation, he returned to his father's house, much reduced in strength.

He next entered the employ of a physician, who kept a farm in addition to his practice. This gentleman engaged to instruct him in medicine, but he did not fulfil his engagement:

and further, he used the young man so badly, that he was obliged to leave his service. He received a severe hurt in one arm a fortnight before he left, but he had contrived to perform his duties with the other, and the doctor did not pay any attention to it. Owing, perhaps, to this neglect, Ferguson was confined to his bed for two months, on his return home.

As an amusement for the hours of pain and languor, he constructed a wooden clock, which he says "kept time pretty well," although it must have been of a rather rough make; for the bell used to tell the hours was the neck of a broken bottle.

When his health was in some measure restored, he tried his skill on a watch, which was also made of wood. He could understand the principles of the pendulum, and weight, and line, but he was curious to know how a watch could be constructed to enable it to go in all positions.

"But happening one day to see a gentleman ride by my father's house," he says, "I asked him what o'clock it then was? He looked at his watch and told me. As he did that with so much good nature, I begged of him to show me the inside of his watch; and though he was an entire stranger, he immediately opened it and put it into my hands. I saw the spring box with part of the chain round it, and asked him what it was that made the box turn round? He told me that it was turned round by a steel spring within it. Having then never seen any other spring than that of my father's

gun-lock, I asked how a spring within a box could turn the box so often round as to wind all the chain upon it? He answered, that the spring was long and thin; that one end of it was fastened to the axis of the box, and the other end to the inside of the box; that the axis was fixed, and the box was loose upon it. I told him I did not thoroughly understand the matter.

“‘ Well, my lad,’ said he, ‘ take a long, thin piece of whalebone; hold one end of it fast between your finger and thumb, and wind it round your finger, it will then endeavour to unwind itself; and if you fix the other end of it to the inside of a small hoop, and leave it to itself, it will turn the hoop round and round, and wind up a thread tied to the outside of the hoop. I thanked the gentleman, “ he adds,” and told him I understood the thing very well.”

He contrived to make a watch on these principles, with wooden wheels and whalebone springs; enclosing the whole in a wooden case, not much larger than a tea-cup. This ingenious little machine was destroyed through the carelessness of a neighbour. He let it drop from his hands whilst examining the works, and turning clumsily round to pick it up, he stepped upon it and crushed it. The elder Ferguson was so provoked by the man's awkwardness, his son says, that he felt almost inclined to beat him. He did not try to make another, feeling convinced that it would not be of any real use; but he turned the insight he had thus gained into the business of watch-

making to practical account, and earned a little money by cleaning watches and clocks for persons in the neighbourhood.

About this time, Ferguson was invited to reside in the house of Sir James Dunbar, where he made himself useful in many ways. Lady Dipple, the sister of Sir James, was much interested for him; she suggested that he should exercise his ingenuity by drawing patterns for ladies' dresses. This he did, and his patterns were so much admired that other ladies sent to him.

"I began," he says, "to think myself growing very rich, by the money I got by such drawings; out of which (he to his credit adds,) I had the pleasure of occasionally supplying the wants of my poor father." But making patterns for ladies' dresses, however lucrative, and calling for ingenuity, could not satisfy the cravings of his intellect. He still continued the study of astronomy, making observations on the stars, as before, by the aid of his beads.

Ferguson afterwards left the residence of Sir James for that of Mr. Baird, Lady Dipple's son-in-law, where he had access to a well-stocked library. Nothing seemed to come amiss to his inventive genius, and persevering efforts; and he next tried his skill in taking likenesses. He drew a portrait of his new patron, which was so much admired that his generous friends took him to Edinburgh, that he might be regularly instructed in the art of painting; Lady Dipple offering her house as

his home for two years, whilst he was receiving lessons. No painter could, however, be met with who would take him as a pupil without a premium. This discovery seemed to throw a blank on his fair prospects; but one of his friends, Dr. Keith, advised him to boldly commence, at once, trusting to his own genius. He followed this counsel, indeed he had no other resource, and he succeeded beyond his hopes. The Marchioness of Douglas gave him her patronage; and he found full employment for his pencil. He was very soon able to support himself with credit, and materially to assist his aged parents.

After a stay of two years in Edinburgh, he returned to his native village, where he set up the practice of medicine; having previously purchased a quantity of pills, plasters, and drugs, of various descriptions. He had not, however, the necessary qualifications for this profession, and he did not succeed. Of those persons who took his medicines, few paid for them, and fewer still, he acknowledged, derived benefit from them. When aware of the failure of his plan, he did not at once return to Edinburgh, and resume his pencil, but spent a few months at Inverness, engaged in his favourite study—astronomy. His drawings, exhibiting the eclipses of the sun and moon, which were made at this time, were engraved, and went through several impressions. They, moreover, gained for him the friendship of Professor Maclaurin, who assisted him in his philosophical studies.

Portrait painting was still, however, his chief means of support.

In the year 1743, Ferguson journeyed to London, with the hope of gaining an appointment as teacher of mechanics and astronomy, pursuits most congenial to his taste. He was introduced to Mr. Folks, the President of the Royal Society, who took him to a meeting of the society, held on the evening of the same day, and thus brought him into immediate notice. He published his first work soon after, titled "A Dissertation on the Phenomena of the Harvest Moon," with a description of a New Orrery he had constructed. He put this book forth very modestly.

"Having never had a grammatical education," he says, "nor time to study the rules of just composition, I acknowledge that I was afraid to put it to the press." It was well received, however, by the public, as were also other works which soon followed from the press.

In the year 1748, he commenced a course of lectures, and he became very popular both as a writer and a lecturer. His Majesty George III., who was then a youth, frequently went to hear him lecture; indeed, his lectures attracted a numerous and fashionable audience. He now gladly renounced his old profession of portrait-painting, which he had followed for six-and-twenty years as a means of support, and devoted his whole time to the study of his favourite sciences, astronomy and mechanics.

Soon after George III. ascended the throne,

he allowed Ferguson a pension of £50 per annum, from his private purse. In 1763, he was elected a Fellow of the Royal Society; and, in 1770, a Member of the American Philosophical Society. Both as a writer and lecturer, Ferguson was highly esteemed. He had a happy knack of treating science in a clear and simple style. Speaking of one of his works on astronomy, Madame de Genlis said, "This book is written with so much clearness, that a child of ten years old may understand it perfectly." [1]

James Ferguson died in 1776, in his sixty-sixth year, leaving an only son; to whom he bequeathed a considerable sum of money, which he had honourably acquired by industry and perseverance. [1]

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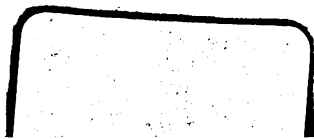
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the 1990s, the number of people in the world who are undernourished has increased from 600 million to 800 million (FAO 1996).

There are a number of reasons why the world's population is becoming more undernourished. One of the main reasons is that the world's population is growing very rapidly. In 1990, there were 5.3 billion people in the world. By 2000, there will be 6.1 billion people in the world. By 2010, there will be 6.9 billion people in the world. By 2020, there will be 7.6 billion people in the world.

Another reason why the world's population is becoming more undernourished is that the world's food production is not keeping pace with the world's population growth. In 1990, the world produced 2.1 billion tonnes of food. By 2000, the world will produce 2.4 billion tonnes of food. By 2010, the world will produce 2.7 billion tonnes of food. By 2020, the world will produce 3.0 billion tonnes of food.

A third reason why the world's population is becoming more undernourished is that the world's food is not being distributed evenly. In 1990, 1.1 billion people in the world were undernourished. By 2000, 1.4 billion people in the world were undernourished. By 2010, 1.7 billion people in the world were undernourished. By 2020, 2.0 billion people in the world were undernourished.

There are a number of ways in which the world's population can be made more food secure. One way is to increase the world's food production. This can be done by increasing the area of land used for food production, by increasing the yield of food crops, and by increasing the efficiency of food production.

Another way to make the world's population more food secure is to improve the distribution of food. This can be done by increasing the amount of food that is available in the world, by improving the infrastructure for food distribution, and by improving the purchasing power of the world's population.

A third way to make the world's population more food secure is to reduce the world's population. This can be done by increasing the age at which people have children, by increasing the mortality rate of children, and by increasing the mortality rate of adults.

There are a number of other ways in which the world's population can be made more food secure. These include: increasing the world's food reserves, improving the world's food security policies, and increasing the world's food security research.

It is important to note that the world's population is becoming more undernourished very rapidly. If the world's population continues to grow at its current rate, there will be 8.5 billion people in the world by 2020. This means that there will be 2.5 billion more people in the world than there are today.

It is also important to note that the world's food production is not keeping pace with the world's population growth. If the world's food production continues to grow at its current rate, there will be 3.3 billion tonnes of food in the world by 2020. This means that there will be 1.3 billion tonnes more food in the world than there are today.